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ABSTRACT

This volume is one of the products of the knowledge development effort implemented under the mandate of the Youth Employment and Demonstration Projects Act of 1977. It is a report of an assessment study designed to determine the status and results of the implementation of mixed income experiments at 47 Comprehensive Employment and Training Act (CETA) sites during fiscal years 1978 and 1979. Mixed income experiments are designed to test whether and/or to what extent income-eligible youth benefit from working with and being trained alongside nonincome-eligible youth, as opposed to receiving the same services in projects where all participants are income eligible. Data were collected from program plans and project reports, telephone inquiries to prime sponsors, and site visits. The conduct of these mixed income experiments and their individual findings vary significantly, making any aggregate analysis difficult. Each of the tests in varying degrees failed to meet accepted practices in research methodology, and therefore the results of this knowledge effort are inconclusive. From what operational data were gathered, however, no conclusive evidence of benefit to youth participants was shown, and no change in low-income guidelines for participants is warranted. The mixed income hypothesis, however, does warrant further investigation. It is recommended that future experimental efforts follow stricter research guidelines. (The report includes a brief case study of the tests conducted.) (Other youth knowledge development reports are available through ERIC--see note.) (KC)

YOUTH KNOWLEDGE DEVELOPMENT REPORT

SERVICE AND PARTICIPANT MIX
Local Mixed Income Testing

ED206867

May 1980

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YOUTH KNOWLEDGE DEVELOPMENT REPORT 4.1

LOCAL MIXED INCOME TESTING

Mark Battle and Associates

April 1980

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402

OVERVIEW

A fundamental youth policy issue is the degree to which employment and training resources should be targeted according to family or household income. The incidence and severity of education and employment problems are correlated with family income, so that targetting achieves its fundamental mission of concentrating resources on a group most likely to have problems. However, what holds in the aggregate does not hold in individual cases. Many youth from low-income families need help less than other youth from somewhat more affluent families. Income certification creates significant administrative problems. Segregation of youth by income might reduce community support for employment and training programs. Segregation might also reduce the developmental opportunities of low-income youth by removing them from contact and interaction with a more diverse group, or by "negative labelling" which affects their own self-perceptions or those of employers who view participants as a group selected because of problems.

There is, thus, a tradeoff between the use of tight income eligibility standards to concentrate resources on youth most in need, and less restrictive standards which are easier to administer, which may establish a broader base of community support, which may reach youth in need who are not poor, and which may improve the experience of the low-income youth by reducing negative labelling and increasing the sphere of social interaction. The terms of the tradeoff have not been documented. Research provides evidence concerning the correlations between individual need and family income but the benefits of less restrictive standards have not been measured.

To address one aspect of the tradeoff, the Youth Employment and Demonstration Projects Act authorized that ten percent of the funds under Youth Employment and Training Programs "may be used by programs which include youths of all economic backgrounds to test the desirability of serving youth of all economic backgrounds." The regulations provided for local prime sponsors to use their formula funds for "Ten Percent Tests":

> "A prime sponsor may design a special component using up to 10 percent of its YETP funds for programs to serve a mixture of youth from families above and below the (YETP eligibility) income level... The program should

test whether and to what extent income eligible youth benefit from participating in programs designed to serve youth from all economic backgrounds. This special component shall:

> (1) Have and follow a structured experimental design;
>
> (2) Establish and use comparison groups;
>
> (3) Provide for followup on participants; and
>
> (4) Provide in an Annual Narrative Report a followup on the experimental outcomes."

Specific guidance was also given on experimental design options (included in the appendix to this report).

During Fiscal Years 1978 and 1979, 47 mixed income tests were proposed by 36 prime sponsors in eight regions of the country. This report provides an analysis of the tests and their results.

The evidence is inconclusive about the impacts of mixing on economically disadvantaged youth. Most of the tests themselves lacked the rigor or scale to draw definitive conclusions. The more structured experiments produced evidence of positive impacts in some cases and no noticeable impacts in others. If the null hypothesis is that income mixing will not alter the experience of low-income participants enough to offset reduced services due to the allocation of resources to youth with greater income, this hypothesis is not overturned by the evidence. The impacts, where they were measured, were very modest.

Income tests were an attempt by prime sponsors to respond to the local knowledge development mandate. Review of the tests as "structured experiments" suggests the limitations of this type of approach. The "batting average" of successful implementation was low, sample sizes were necessarily limited, and the designs and instruments varied so much that the results are difficult to compare across sites. Where successfully implemented, the experiments have an effect on local policy and may be important from a process sense although not in terms of reaching conclusive findings.

There is clearly a need for standardized assessment and structured experiments in multiple sites. A "mixed-income demonstration" has, therefore, been initiated in five sites under national funding and direction. It provides greater control on the income differentials between experimentals and controls, specifies the level of interaction for mixing within activities, and standardizes the measurement tools. Unquestionably, this demonstration will provide more conclusive evidence concerning impacts.

On the other hand, the prime sponsor tests, with all their limitations, provide an important policy baseline. In an operational setting, the effects of mixing are apparently not so great that one could advocate change in income eligibility standards based on projected benefits to low-income youth from interaction with others.

Income mixing across all local programs rather than in an isolated experiment might change this finding by making CETA participants more attractive to employers and by increasing public support. It might open the programs to youth in need but above the income standard (although if this occurs it is questionable whether the low-income participants would benefit from interaction with others who have just as severe problems). Less restrictive income eligiblity might be desirable for political or administrative reasons. However, it does not appear that its impacts on low-income youth are a major justification.

This volume is one of the products of the "knowledge development" effort implemented under the mandate of the Youth Employment and Demonstration Projects Act of 1977. The knowledge development effort consists of hundreds of separate research, evaluation and demonstration activities which will result in literally thousands of written products The activities have been structured from the outset so that each is self-standing but also interrelated with a host of other activities. The framework is presented in A Knowledge Development Plan for the Youth Employment and Demonstration Projects Act of 1977, A Knowledge Development Plan for the Youth Initiatives Fiscal 1979 and Completing the Youth Agenda: A Plan for Knowledge Development, Dissemination and Application for Fiscal 1980.

Information is available or will be coming available from these various knowledge development efforts to help resolve an almost limitless array of issues. However, policy and practical application will usually require integration and synthesis from a wide array of products, which, in turn, depends on knowledge and availability of these products.

A major shortcoming of past research, evaluation and demonstration activities has been the failure to organize and disseminate the products adequately to assure the full exploitation of the findings. The magnitude and structure of the youth knowledge development effort puts a premium on structured analysis and wide dissemination.

As part of its knowledge development mandate , therefore, the Office of Youth Programs of the Department of Labor will organize, publish and disseminate the written products of all major research evaluation and demonstration activities supported directly by or mounted in conjunction with OYP knowledge development efforts. Some of the same products may also be published and disseminated through other channels, but they will be included in the structured series of Youth Knowledge Development Reports in order to facilitate access and integration.

The Youth Knowledge Development Reports, of which this is one, are divided into twelve broad categories:

1. Knowledge Development Framework: The products in this category are concerned with the structure of knowledge development activities, the assessment methodologies which are employed, the measurement instruments and their validation, the translation of knowledge into policy, and the strategy for dissemination of findings.

2. Research on Youth Employment and Employability Development: The products in this category represent analyses of existing data, presentation of findings from new data sources, special studies of dimensions of youth labor market problems, and policy issue assessments.

3. Program Evaluations: The products in this category include impact, process and benefit-cost evaluations of youth programs including the Summer Youth Employment Program, Job Corps, the Young Adult Conservation Corps, Youth Employment and Training Programs, Youth Community Conservation and Improvement Projects and the Targeted Jobs Tax Credit.

4. Service and Participant Mix: The evaluations and demonstrations summarized in this category concern the matching of different types of youth with different service combinations. This involves experiments with work vs. work plus remediation vs. straight remediation as treatment options. It also includes attempts to mix disadvantaged and more affluent participants, as well as youth with older workers.

5. Education and Training Approaches: The products in this category present the findings of structured experiments to test the impact and effectiveness of various education and vocational training approaches including specific education methodologies for the disadvantaged, alternative education approaches and advanced career training.

6. Pre-Employment and Transition Services: The products in this category present the findings of structured experiments to test the impact and effectiveness of school-to-work transition activites, vocational exploration, job-search assistance and other efforts to better prepare youth for labor market success.

7. Youth Work Experience: The products in this category address the organization of work activities, their output, productive roles for youth and the impacts of various employment approaches.

8. Implementation Issues: This category includes cross-cutting analyses of the practical lessons concern "how-to-do-it." Issues such as learning curves, replication processes and programmatic "batting averages" will be addressed under this category, as well as the comparative advantages of alternative delivery agents.

9. Design and Organizational Alternatives: The products in this category represent assessments of demonstrations of alternative program and delivery arrangements such as consolidation, year-round preparation for summer programs, the use of incentives and multi-year tracking of individuals.

10. Special Needs Groups: The products in this category presents findings on the special problems of and the programmatic adaptations needed for significant segments including minorities, young mothers, troubled youth, Indochinese refugees and the handicapped.

11. Innovative Approaches: The products in this category present the findings of those activities designed to explore new approaches. The subjects covered include the Youth Incentive Entitlement Pilot Projects, private sector initiatives, the national youth service experiment, and energy initiatives in weatherization, low-head hydroelectric dam restoration, windpower and the like.

12. Institutional Linkages: The products in this category include studies of institutional arrangements and linkages as well as assessments of demonstration activities to encourage such linkages with education, volunteer groups, drug abuse and other youth serving agencies.

In each of these knowledge development categories, there will be a range of discrete demonstration, research and evaluation activities focused on different policy, program and analytical issues. In turn, each discrete knowledge development project may have a series of written products addressed to different dimensions of the issue. For instance, all experimental demonstration projects have both process and impact evaluations, frequently undertaken by different evaluation agents. Findings will be published as they become available so that there will usually be a series of reports as evidence accumulates. To organize these products, each publication is classified in one of the twelve broad knowledge development categories, described in terms of the more specific issue, activity or cluster of activities to which it is addressed, with an identifier of the product and what it represents relative to other products of the demonstrations. Hence, the multiple products under a knowledge development activity are closely interrelated and the activities in each broad cluster have significant interconnections.

This report on prime sponsor activity should be read in conjunction with the forthcoming results of The Mixed Income Demonstration in the "service and participant mix" category. As background, the correlations between family income and employment or educational problems are identified in several of the volumes in the "research on youth employment and employability development" category, particularly A Review of Youth Employment Problems, Programs and Policies. Finally, the local knowledge development experience has implications for conclusions about prime sponsors' research and evaluation capacity as assessed in Youth and the Local Employment Agenda in the "program evaluations" category as well Evaluative Research in Local Youth Programming in the "knowledge development framework" category.

ROBERT TAGGART
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EXECUTIVE SUMMARY

Mixed income experiments are designed to test whether and/or to what extent income-eligible youth benefit from working with and being trained alongside nonincome-eligible youth, as opposed to receiving the same services in projects where all participants are income eligible. The mixed income experiment is presented in the Comprehensive Employment and Training Act as an optional program activity for prime sponsors and is part of an overall knowledge development effort of the Office of Youth Programs. This state of the art report presents the status and results of the mixed income experiments conducted by prime sponsors in fiscal years 1978 and 1979.

Forty-seven tests of the mixed income hypothesis were proposed by 36 prime sponsors in eight regions of the country. Twenty-nine tests were completed in FY 1978; fourteen are in operation in FY 1979; three were proposed but never implemented and no information was obtained on one. The conduct of these mixed income experiments and their individual findings vary significantly making any aggregate analysis difficult. Each of the tests in varying degrees failed to (1) adhere to the research guidelines established by the Office of Youth Programs, (2) specify variables in operational or measurable terms, (3) insure adequate sample size and/or appropriate control groups, (4) adequately monitor data collection processes, (5) utilize appropriate or adequate testing instruments, (6) allow sufficient time for the program effort and (7) provide sufficient follow-up to determine the effect of the mixed income testing. The results of this knowledge development effort are, therefore, quite inconclusive.

The mixed income hypothesis, however, does warrant further investigation. It is therefore recommended that future experimental efforts (1) operationalize the variables of age, sex, ratio of income eligible to nonincome eligible, level of interaction, type of program and extent of income differential, (2) control for attrition and confidentiality, (3) utilize standard and appropriate pre- and post-test instruments,

(4) implement standardized follow-up procedures and (5) require a six-month minimum length of program involvement.

This assessment of the status and results of the mixed income experiments was conducted by Mark Battle Associates, Inc. under contract to the Office of Youth Programs, U.S. Department of Labor. The analysis was based on data collected from three sources: (1) secondary sources, e.g., program plans and project reports, (2) telephone inquiries with regional and local prime sponsor personnel, and (3) site visits to selected prime sponsors who conducted the mixed income experiment. The report describes the types of tests engaged in, elements examined and elaborates on the findings and recommendations briefly presented here. The report also provides a brief case study for each of the tests conducted as well as a list of respondents in the telephone inquiries and site visits.

August 15, 1979

CHAPTER I

INTRODUCTION

Mark Battle Associates (MBA), under contract to the Office of Youth Programs (OYP), has prepared a report of an assessment study designed to determine the status and results of the implementation of mixed income experiments at 47 sites. The mixed income experiments are an authorized utilization of ten percent of a local prime sponsor's youth employment and training program (YETP) budget for conducting this special test. The mixed income experiment is one approach to knowledge development in the Youth Employment and Demonstration Programs Act (YEDPA). This chapter describes the mixed income experiment.

The Purpose of Knowledge Development Initiatives in the Department of Labor

Over the past several years the Department of Labor (DOL) has found it increasingly important to not only document employment and general manpower trends but to describe the theoretical nature of these trends. It has become more important to engage in basic research to develop knowledge about the employment trends rather than merely reporting an unemployment rate. This research is designed to determine what works best for whom and under what conditions.

Knowledge development, then, is basic research conducted by DOL to ask the difficult questions about employment, training and general manpower development. The results of such investigations are to be used as a basis for improving the delivery of department services.

Office of Youth Programs Knowledge Development Efforts

The Office of Youth Programs in the Department of Labor has authorized many approaches to knowledge development. Each approach has sought to explore at least one method of reducing the structural unemployment problems of the nation's youth. It was intended that the results of these various studies would be used as a basis for improving the format and implementation of future employment and training programs for youth.

As one approach to such exploration, Section 345(a)(2) of the Youth Employment and Demonstration Programs Act authorizes the use of ten percent of the funds available for youth employment and training programs to include youth from all economic backgrounds in order to test whether and/or to what extent income-eligible youth (those whose family income is no more than 85 percent of the lower living standard income level) would benefit from working with and being trained alongside nonincome-eligible youth as opposed to receiving the same services in projects where all participants are income eligible. This is the mixed income experiment.

Rationale for the Mixed Income Experiment

There are widely varying viewpoints about the wisdom of targeting programs for the most economically disadvantaged. These viewpoints need to be understood in designing any test of income mixing. Arguments against targeting usually begin with the claim of vertical inequities, i.e., youth above any arbitrary income cutoff may be as much in need as those below. Targeting is justified by the belief that scarce resources should go to those most in need and that the income eligibles have far more severe problems than those not eligible. For YETP, Congress has limited the more costly services to the more economically disadvantaged or income-eligible youth from families with incomes less than 85 percent of the lower living standard income level.

The mixed income experiment, on the other hand, allows for a portion of the YETP budget to be used for the over income (nonincome eligible) when such is done in the context of a knowledge development test. The concept being tested relates to participant grouping and asks whether income-eligible youth are better served in homogeneous or heterogeneous groups. Some of the possible benefits the income-eligible youngsters may receive from mixed income grouping (heterogeneous) are noted:

1. In mixed income groups, program effectiveness may be increased because of the presumed availability of positive role models among the participants. Therefore, the over income youth would positively influence the income eligible.
2. Youth are highly sensitive to peer group pressure, and a mixed income group may increase the chances of that peer group supporting positive attitudes toward self, work and society in general.
3. Prospective employers may be more willing to take a chance on a lower income youth from a program which is not economically targeted than from one where all participants are known to be poor.

Opponents have not denied the above claims, but they have raised arguments against the use of scarce resources for those above the usual income cutoff figure. Furthermore, it is not clear that the possible benefits to income-eligible youth in mixed groups would be greater than the loss of program spaces for other income-eligible participants.

It is an open issue but one worthy of investigation. Income mixing under YETP projects has been allowed but has been limited to prescribed structured experiments and only ten percent of the total budget. This study, again, reports on the status and results of the 47 mixed income tests proposed in fiscal years 1978 and 1979.

The Structure of the Mixed Income Experiments

When YEDPA authorized the use of ten percent of the YETP funds for mixed income testing, they also prescribed the hypothesis to be tested and the research design to be used. Specific treatments or services to be offered participants were to be decided on a site-by-site basis and described in plans submitted to the respective regional offices.

Hypothesis

There was only one hypothesis to test in the mixed income experiments (or tests), and that was:

> If income-eligible youth are trained and/or work alongside nonincome-eligible youth in a YETP project, then the program benefits will be greater for these income-eligible participants than for similar income-eligible youth trained only with other income-eligible youth.

Another way to define the hypothesis is to reduce the language used stating:

> Heterogeneous grouping (mixed income groups) will yield greater results for targeted participants (the income eligible) than homogeneous grouping.

The null hypothesis for either of the above statements is that income-eligible participants will not benefit from mixed grouping in training and/or work assignments.

The emphasis in the mixed income experiment is on predicted change in the income-eligible youngster. This is the targeted participant who will presumably be positively impacted by the presence of and interaction with nonincome-eligible youngsters.

Research Design

A before-after comparison was needed to test the mixed income hypothesis. A control group of income-eligible youth not receiving services in a mixed income setting had to be established. Pre- and post measures of performance had to be collected and analyzed. These requirements dictated the use of a pretest/post-test control group research design that was prescribed by the Office of Youth Programs for the conduct of the mixed income tests.

The rationale behind the use of a pretest/post-test control group design is elegant in its simplicity. Academicians engaged in research realized that they would not know where they had gone nor how great their progress had been without plotting the route. The techniques many devised for plotting the route included numbers, and numbers often implied testing at the beginning and the end of a trip. Hence, the widespread use of pre- and post-testing emerged.

A second problem academicians had to ponder was that change is always occurring, and they wanted to know what factors or services were causing the change. They realized that two groups had to be examined. The first group would receive some service; this would be the experimental group. The second group would not receive the service; this would be the control group. The results over time for the experimental group and control group could be compared and whatever differences were noted could be attributed statistically either to the service or the always present change by chance. For these reasons, the use of control groups is widely accepted and expected in research. Diagram I is the pretest/post-test control group design as it is applied to the mixed income experiment.

Diagram I

The Pretest/Post-test Control Group Design
for the Mixed Income Experiments

	Pretest	Services Received	Post-test
Experimental Group	X	(Heterogeneous) Mixed Income Grouping	X
Control Group	X	(Homogeneous) Nonmixed Income Grouping	X

The next chapter describes the approach of Mark Battle Associates to a study of the 47 mixed income experiments proposed for fiscal years 1978 and 1979. The following chapters present the findings, the state of the art and recommendations for future mixed income experiments.

CHAPTER II

DATA COLLECTION PLAN

This study was designed to determine the status and results of the mixed income experiments being conducted in eight regions and to develop recommendations regarding the nature, scope and research parameters for future experimentation. Three major approaches to data collection were used in this study. These were:

1. Analysis of secondary data such as program plans, reports and other written documents
2. Telephone inquiries with youth coordinators at the regional level and program people at the local site level
3. Site visits to selected test locations representing each region, each type of test and other unique features

The following data collection plan includes the specifics of each approach to data collection as used by MBA.

Approaches to Data Collection

Analysis of Secondary Data

The purposes of this approach to data collection were to acquire familiarity with the field of available ten percent tests and to develop reasonable categories for analyzing the hypotheses. Four hypotheses were identified.

The first hypothesis, sometimes explicit, always implicit, ran throughout each of the tests. It was assumed that there was some effect to be noted when income-eligible and nonincome-eligible youth were mixed in training or other work-related experiences. It was assumed that the nature of the effect would be positive for the income-eligible (more disadvantaged) youth, although this possibility was not readily acknowledged. It was expected that income-eligible youth would show increases in motivation and/or skills as a result of mixing with other youth in the training programs. This hypothesis was:

- The general attitude and behavior of income-eligible youth will change when these youths are trained or counseled with nonincome-eligible youth.

Two of the three other hypotheses more specifically noted and described the effect discussed above. These were:

- The intrapersonal intrapsychic coping skills and insights will change in the income eligible more rapidly when he/she is mixed with the nonincome eligible.
- The academic and/or job-related skills will change in the income eligible more rapidly when he/she is mixed with the nonincome eligible.

The fourth hypothesis was as nonspecific as the first except that it was applied to physically handicapped youth. It was:

- The general attitude and behavior of physically handicapped youth who are also income eligible will change when these youths are trained or counseled with the nonincome-eligible handicapped.

These hypotheses formed the basis of the KBA classification of each test (see Table II-1, Types of Tests). The category identified as EXPLORATORY includes those tests examining the first hypothesis. The category identified as AFFECTIVE CHANGE includes those tests examining the second hypothesis. SKILLS ACQUISITION includes the third hypothesis and SPECIAL GROUPS includes the fourth hypothesis.

Telephone Inquiries

The analysis of secondary data yielded useful information; however, many voids remained. In order to develop more comprehensive descriptions of the

TABLE II-1

TYPE OF TESTS

Code	Title	Explanation *
01	Exploratory	This category includes all those tests in which only some general positive benefit was predicted; very nonspecific predictions were generated.
02	Affective Change (Internal)	This category includes all those tests in which change was predicted in intrapersonal or intrapsychic dynamics, such as motivation, self-concept, level of aspiration and the like.
03	Skills Acquisition (External)	This category includes all those tests in which change was predicted in academic or skills achievement; these attributes are external to the affective change in Code 02 above.
04	Special Groups	This category includes all those tests in which handicapped and other special youngsters not ordinarily well served by a YETP effort are participants. Positive change is predicted for the handicapped youngster.

* In some cases, these predicted outcomes suggest the services to be offered and the approaches to evaluating success, i.e., transition services may be used to increase intrapersonal motivation and then can be evaluated by a before-after test of level of aspiration. However, the MBA classifications are made around the predicted changes and not services.

47 ten percent tests, a second approach to data collection involved telephone contacts at the regional and local site levels. Instruments appropriate to these activities were developed.

The data from the telephone inquiries were used to finalize selection of the sites to be visited by the MBA research team, to refine data collection instruments for site visits, and to develop comprehensive descriptions of each of the 47 tests.

Site Visits

The third approach to data collection for this study was the site visit. Fourteen sites selected to represent each region and type of hypothesis being tested were visited by the MBA research team to secure additional descriptive and qualitative data and to measure other significant program features.

Four groups of people were interviewed during site visits. These were CETA administrators at the prime sponsor level, CETA or YETP administrators at the service delivery level, service provider (on-the-job trainer or counselor/teacher as appropriate) and service recipients from income-eligible and nonincome-eligible groups.

Data Analysis

The analysis of the data generated by all three approaches to data collection was based on a broad comparison of MBA findings regarding the status and nature of these tests with ten crucial elements generally accepted as standard/essential in the conduct of experimental work. These ten were used because they reflected DOL's explicit instructions and mandates regarding the mixed income tests. The following includes a discussion of the ten crucial elements of a good experimental design against which the mixed income experiments were measured.

Clear Hypothesis: One of the criteria of a good experiment is the explicitness of the hypothesis. The hypothesis is the "if-then" statement on which the study is based. If income-eligible youth interact with nonincome-eligible youth, the income-eligible youth will show greater change than they would without the interaction.

Operational Variables: Many interesting concepts in the social/behavioral sciences are nonobservable. For instance, one has to infer the presence of motivation from a person's behavior. Motivation cannot be observed in isolation of some drive-related behavior. Good experiments specify observable indicators of internal variables.

In addition, experiments should distinguish independent and dependent variables. The independent variables are those controlled by the experimenter; the dependent variables result from changes in the independent variables. The behavior of income-eligible youth (dependent variable) will be changed by mixing them with nonincome-eligible youth (the independent variable). Other treatments and services applied are also independent variables presumed to affect the outcomes or dependent variables.

Specific Treatments/Services: It is essential that experiments state very clearly what will happen to experimental subjects (and not happen to controls), for how long and under what conditions. Treatments and services should not emerge or develop during the study. They should be specified before the study begins. In this case, subjects were placed in mixed income groups; controls were placed in homogeneous groups.

Agreement Between Hypothesis, Variables and Treatment/Services: It should be apparent that these three concepts have to be congruent, each with the other two. If the hypothesis is to mix to increase motivation and motivation is measured by level of effort associated with task completion in a group, then a treatment or service that did not include a mixed group task effort would be incongruent with the hypothesis and outcome variable.

Subject Selection: The selection of subjects should be random to decrease the possibility of selecting a totally nonrepresentative group. All key concepts, e.g., income and age, should be carefully verified.

CHAPTER III

FINDINGS

According to all data available to MBA during the conduct of this investigation, 47 mixed income experiments were proposed for fiscal years 1978 and 1979. These 47 tests of the mixed income hypothesis were located in 36 prime sponsor sites in eight regions of the United States. Of the 47 tests proposed, 29 were actually completed in FY 1978; 14 are in operation in FY 1979; and 3 were never implemented. MBA was unable to obtain information on one.

An appendix to this report contains detailed case studies and analyses on a site by site basis. These studies are based on data collected during either telephone inquiries, site visits or written reports made available to MBA from the prime sponsors. In some cases all three sources of data were available to MBA and utilized in the preparation of these case studies and analyses. Table III-1 displays the sources of data by prime sponsor and the number of tests for each prime sponsor.

A general description of the tests examined in this study of the status and results of mixed income experiments is presented in Table III-2. Each site is listed, number of tests noted and summarized, and the type of test(s) indicated. The code for the Type of Tests is located in previously mentioned Table II-1. This "Super Matrix" is a quick reference to the 1978 and 1979 mixed income experiments.

Overview of the Effects of Income Mixing in Youth Employment Training Programs

Table III-3, also at the end of this chapter, presents an overview of the effects of income, mixing in Youth Employment Training Programs for all tests conducted in FY 1978 and 1979. This table is based on an analysis of all effectiveness data available to the MBA evaluation team though these data do not necessarily respond to the mixed income hypothesis. The effectiveness ratings applied are positive, negative, no effect and unknown.

TABLE III-1

SOURCES OF DATA

Region	Prime Sponsor	Number of Tests	Data Source		
			Written Report	Telephone Inquiry	Site Visit
2	New York City	1	++	++	++
	Niagara County	1	X	X	
	Steuben County	1	X	X	X
	Suffolk County	2	X	X	X
3	Northumberland County	2	X	X	
	Schuykyll County	1	X	X	
	State of West Virginia	1	X	X	
	Virginia BOS	6	X	X	X
4	Broward County	1	X	X	
	City of Charlotte	1		X	
	Middle Georgia Consortium	1		X	X
	Tennessee BOS	1	X	X	
5	Ann Arbor City	1	X	X	
	Fort Wayne	1	X	X	
	Indiana BOS	2		X	
	Indiana (SETC)	2	X	X	X
	Lansing Tri County	2	X	X	
	Macon County	1	X	X	
	Milwaukee County	1	X	X	X
	Racine, Wisconsin	2	X	X	X
	Ramsey County	1	X	X	
	Rockford Consortium	1	X	X	
	St. Paul City	1	X	X	X
	WOW (Wisconsin Consortium)	1	X	X	
6	Coastal Bend Consortium	1		X	X
	Ouachita Parish Police Jury	1		X	
7	City of Omaha	1		X	X
	City of Wichita	1		X	
8	Arapahoe County	1	X	X	
	Boulder County	1		X	X
	North Dakota BOS	1		X	
9	California BOS	1	X		
	Marin County	1	X	X	
	Monterey County	1	X	X	
	San Diego	1		X	X
	State of Nevada	1		X	X

++ Unable to obtain information

A positive rating means that the implementation of the mixed income test has positive effects for most of the participants involved. A site may receive a positive rating even if all research requirements are not met since this rating is based on qualitative and/or impressionistic data.

A negative rating means that the mixed income test had negative effects for the people involved. It may have added so much administrative "red-tape" that program managers and youth alike were frustrated in their attempts to make the program work.

A no effect rating is assigned when neither a positive nor a negative rating seem appropriate. The mixed income test in these sites apparently had no effect on the relevant people, particularly the youth.

An unknown rating means that data simply were not available to MBA to assign a positive, negative or no effect value. Every effort was made to assign a positive or negative value to each site rather than utilize the no effect or unknown categories.

Confirmation of the Hypothesis

In general, the results obtained by individual sites conducting mixed income tests are inconclusive. That is, at this time, taken as an aggregate, it is difficult to accept the test hypothesis that mixed income grouping (heterogeneous) will result in greater gains for income-eligible youngsters than for nonmixed income grouping (homogeneous). On the other hand, it would not be completely accurate to accept the null hypothesis and assume that the grouping pattern made no difference in outcome.

For instance, the reader will gather from the case studies that, in most sites, test managers, counselors, participants or all three expressed confidence in the mixed income activity, felt it had made a difference, and felt that mixing by income was more useful than not mixing. These respondents told MBA that they observed more rapid change in income-eligible participants in the mixed groups than in the unmixed groups. The respondents also told MBA that much of this observed change was in the direction of more self-confidence, greater career awareness and better job-related skill acquisition.

Unfortunately, these findings are qualitative rather than quantitative and as such are not amenable to structured data analysis. MBA is reluctant to draw any conclusions from qualitative findings such as these. However, the trend and the direction of the trend are noted.

Conduct of Research by Prime Sponsors

A secondary question to this study on the status and results of mixed income experiments for fiscal years 1978 and 1979 is whether and to what extent prime sponsors can independently implement sophisticated and rigorous research efforts. Again the findings are mixed and therefore somewhat inconclusive.

Some of the sites conducting mixed income experiments in fiscal years 1978 or 1979 were quite capable of managing subject selection and assignment, data collection and appropriate analyses. It is not that others were incapable but perhaps too ambitious in their attempts.

Still others did not include the required pre- and post-testing of participants, a control group or other key elements. The failure to include these items may indicate lack of familiarity with the requirements established by the Office of Youth Programs rather than lack of ability.

The findings are mixed and cannot be used to accept or reject the possibility of implementing rigorous research strategies at the local prime sponsor level. The data suggest that, where the research requirements are understood, they can be implemented, and the research process can be effectively managed.

On a site-by-site basis, each test is broadly compared to the ten crucial elements of an experiment previously discussed in the data collection plan. Sites achieved levels of proficiency in these elements at various degrees (see Table II-2).

Clear Hypothesis: The desired hypothesis was prescribed by the Office of Youth Programs, and the test sites only needed to state it. However, some sites chose to restate the hypothesis, and the restatement often led to a lack of clarity. Distinguishing tests by type is MBA's attempt to categorize these different hypotheses (see Table II-1).

Operational Variables: Many sites failed to operationalize the variables (behaviors or attitudes) that they hoped to see changed in mixed income experimental subjects. Concepts such as motivation, attitude or career awareness were not always linked to clearly measurable behaviors or test items.

Specific Treatments/Services: Most sites were able to specify the treatment or service program that they provided.

Agreement Between Hypothesis, Variables and Treatment Services: This necessary congruence was not always present in the mixed income experiments. MBA found much of the lack of congruence to be the result of inadequately operationalized variables and poorly selected instruments.

Subject Selection: As far as MBA could ascertain, experimental subjects were not usually selected randomly. Furthermore, it is not clear in most cases how income was verified and other key characteristics controlled.

Selection of Control Subjects: As far as MBA could ascertain, control subjects were not usually selected randomly. Other key characteristics were not controlled, and it is unclear how income data were verified.

Internal Validity: Few of the tests were able to confirm internal validity because inadequate controls were utilized.

External Validity: Few of the tests were able to confirm experimental replication.

Pretest: Though required by the OYP regulations, some did not use a premeasure of key test variables. Some pretests were qualitative rather than quantitative, making analysis difficult.

Post-test: Though required by the OYP regulations, some tests did not use a post-measure of key variables. Some post-tests were qualitative rather than quantitative, making analysis difficult.

Status of Fourteen Tests Completed in September of 1979

Fourteen tests of the mixed income hypothesis were conducted in FY 1979 and not completed until September 30, 1979. A follow-up inquiry with each of these fourteen tests sites yielded the information presented below.

Suffolk County, New York: Several attempts to secure information from the Suffolk County test administrators were unsuccessful. No status report is possible at this time.

Northumberland County, Pennsylvania: These test administrators conducted a second examination of the mixed income hypothesis in FY 1979 to determine why nonincome eligible youths were not performing as well as the income eligible youths. The conclusion reached by this second test is that nonincome eligible participants do not set performance standards for income eligible participants. They concluded that mixed income grouping does not affect program performance significantly.

Virginia Balance-of-State, Bath County, Virginia: Mixed income grouping has been rated so highly in Bath County that it has been made a regular component of the youth employment training program. However, this test still fails to meet basic research requirements, and data are only impressionistic and qualitative.

Virginia Balance-of-State, Giles County, Virginia: This test provides an alternative school experience for youngsters who cannot function well in a regular high school setting and is being continued in FY 1980. FY 1979 data have not been analyzed, and no final report was available, however, program operators rated the test as a positive addition to the youth employment program.

Virginia Balance-of-State, Stafford, Virginia: This program was concluded abruptly in July or August of 1979, according to information given to MBA. A report was not available at the time of the MBA inquiry.

Virginia Balance-of-State, Stephens City, Virginia: This test is being continued in FY 1980 because it meets community needs to help problem children and to decrease the school attrition rate. However, no pre- or post-tests were used, nor are any planned, so a significant data analysis is not possible. The program appears to be beneficial to youth regardless of their income.

Middle Georgia Consortium: Several attempts to secure information from the Middle Georgia Consortium test administrators were unsuccessful. No status report is possible at this time.

Lansing, Michigan: This test of the mixed income hypothesis is characterized by excellent controls and adherence to research requirements. It is being continued in FY 1980. The results suggest that mixed income grouping positively affects income eligible youths.

Indiana Balance-of-State, Columbus, Indiana: This test yielded many positive results in terms of administration and community support. However, when the results of this test were tallied, there was no significant difference observed between participants in control and experimental groups.

Indiana State Employment and Training Council, New Castle, Indiana: Final reports have not been made available. No conclusions are possible at this time.

St. Paul, Minnesota: St. Paul test administrators did not adhere to all research requirements. The available results showed, however, no significant difference between experimental or control subjects. Program completion rates, educational attainment and the like are measures used for comparison.

Trico-CETA Consortium, Silver Lake, Wisconsin: Several attempts to secure information were unsuccessful. No status report is possible at this time.

North Dakota Balance-of-State: This test of the mixed income hypothesis did not have enough subjects to yield meaningful findings. No pre- or post-tests were used, and the program only ran a brief period.

TABLE III-2

BRIEF DESCRIPTIONS OF THE 47 MIXED INCOME TESTS
FY 1978 and 1979
"The Super Matrix"
Region 2

Prime Sponsor	Test Site	Type of Test	Dates of Operation	Summary of Test
Completed Mixed Income Tests				
1. Niagara County, NY	Niagara County Community College	04	July 24, 1978 to September 15, 1978	A number of specialized services were provided for physically handicapped youth in a mixed income environment. The findings were fairly inconclusive because data collection strategies were not specified.
2. Steuben County, NY	Board of Cooperative Educational Services (BOCES) Wildwood Career Center	01	February to June 1978	Alternative education experiences and exposure to the world of work were the services mixed income test subjects and controls received in Steuben County, New York. A follow-up completed one year later suggests a lower than average dropout rate implying that mixed grouping has some benefit for participants.
3. Suffolk County, NY	Suffolk County, NY	01	February to September 1978	Several variations were used to explore best mix in terms of grouping of participants, experiences provided and wages offered. Out-of-school youth received job experience. Mixed income groups did not fare better than nonmixed; higher wage group had better program outcomes.
Operating Mixed Income Tests				
4. Suffolk County, NY	Suffolk County, NY	01	November 1978 to September 1979	This is essentially the same as the test conducted by this prime sponsor in FY 1978. The number of control subjects has been increased to allow greater analysis.
No Information Available				
5. New York City, NY	Unknown	Unknown	Unknown	Insufficient information available.

TABLE III-2 (Continued)

BRIEF DESCRIPTIONS OF THE 47 MIXED INCOME TESTS
FY 1978 and 1979
"The Super Matrix"
Region 3

Prime Sponsor	Test Site	Type of Test	Dates of Operation	Summary of Test
Completed Mixed Income Tests				
1. Northumberland, Pennsylvania	Northumberland County, Pennsylvania	01	January 16, 1978 to September 30, 1978	Classroom training and work experience were combined with career counseling in this mixed income test. Participants were exposed to three occupational categories in mixed pairs of income-eligible and nonincome-eligible youth. Results for first year showed income-eligible youngsters performing better than nonincome-eligible youngsters.
2. Virginia BOS	Prince George's County	03	June 12, 1978 to September 9, 1978	A summer work experience was provided income-eligible and nonincome-eligible youngsters. However, no data were collected on a pre- or post-basis on which to develop any conclusions.
3. Virginia BOS	Virginia Employment Commission	01	January to June 1978	This test was essentially a program to expose youngsters of all income levels to the world of work. Convocations and workshops were held at area high schools. No data were collected.
4. West Virginia BOS	Wheeling, West Virginia (West Virginia Northern Community College)	03	March 1, 1978 to September 30, 1978	This program provided out-of-school youth with skilled training in major appliance repair on the campus of the local community college. Pre- and post-testing and three follow-ups were key approaches to data collection. Income-eligible youth performed better than nonincome-eligible youth in either the mixed or nonmixed group. The follow-up is continuing on these subjects.
Operating Mixed Income Tests				
5. Northumberland County, Pennsylvania	Northumberland County, Pennsylvania	01	October 1, 1978 to September 30, 1979	Because results from first year's test showed income eligible youth performing better than the nonincome eligible, Northumberland County is running another test now to determine causes for this difference. They have strengthened their measurement techniques in this second study.

TABLE III-2 (Continued)

BRIEF DESCRIPTIONS OF THE 47 MIXED INCOME TESTS
FY 1978 and 1979
"The Super Matrix"
Region 3 (Continued)

Prime Sponsor	Test Site	Type of Test	Dates of Operation	Summary of Test
6. Virginia BOS	Bath County, Virginia	02	February 1978 to September 1979	This work-study program is designed to provide potential school dropouts with a viable alternative to traditional classroom instruction. Participants receive classroom training in Adult Life Skills on the premise that these skills can be translated into internal or affective components. That is, as a result of this exposure to survival skills, participants are expected to develop more independence and responsibility. Positive changes have been observed though there are no systematic data available.
7. Virginia BOS	Giles County, Virginia	02, 03	October 1978 to September 1979	An alternative to typical school instruction is provided 30 participants in the "PATS" (Positive Approach to School) program. Eight of the thirty are income eligible; eight are nonincome eligible; fourteen are control subjects. Progress is based on physical appearance, test scores and job related behaviors. Income-eligible youth in the mixed setting appear to be progressing better than youth in the nonmixed setting. Data are very inconclusive at this time, however, because the test is still operating.
8. Virginia BOS	Stafford, Virginia	02, 03	October 1978 to September 1979	An in-school work-study program was subcontracted to the local school board. Neither testing nor prescreening were performed. However, there is a 1:1 ratio of student to supervisor, and anecdotal reports are made at frequent intervals. Results are inconclusive because test is still in operation.
9. Virginia BOS	Stephens City, Virginia	01	October 1, 1978 to September 30, 1979	Income eligibles and nonincome eligibles are mixed in a nontraditional vocational school setting in this test of the mixed income hypothesis. Pre- and post-tests were not used; however, the observation from personnel associated with the test is that the mixing is not causing any difference in the behavior of income-eligible subjects.

TABLE III-2 (Continued)

BRIEF DESCRIPTIONS OF THE 47 MIXED INCOME TESTS
FY 1978 and 1979
"The Super Matrix"
Region 3 (Continued)

Prime Sponsor	Test Site	Type of Test	Dates of Operation	Summary of Test
Tests Proposed But Never Implemented				
10. Schuykyll, Pennsylvania	Schuykyll-Carbon County, Pennsylvania	01	Not Applicable	This test had been proposed to offer on-the-job training to mixed income pairs.

TABLE III-2 (Continued)

BRIEF DESCRIPTIONS OF THE 47 MIXED INCOME TESTS
FY 1978 and 1979
"The Super Matrix"
Region 4

Prime Sponsor	Test Site	Type of Test	Dates of Operation	Summary of Test
Completed Mixed Income Tests				
1. Broward County, Florida	Broward County, Florida	01	March 1, 1978 to September 30, 1978 1978	Youth apprenticeship training in retail sales was paired with guided group interaction. Multivariate analyses were calculated and yielded no statistically significant differences based on participant groupings.
2. Tennessee BOS	Upper Cumberland, Tennessee	01	July to September 30, 1978	This summer program consisted of a variety of work experiences for out-of-school youth. Pre- and post-data were collected and analyzed, but these data yielded no statistical significance.
Operating Mixed Income Tests				
3. Middle Georgia Consortium	Robbins Air Force Base Macon, Georgia	01, 03	January 1978 to September 30, 1979	An Aerospace Careers and Exploration Program is being conducted at the Robbins Air Force Base in Middle Georgia. This test started in FY 1978 and will conclude in FY 1979 providing skilled training and counseling to out-of-school youth. Data are inconclusive at this time.
Tests Proposed But Never Implemented				
4. Charlotte, North Carolina	Charlotte, North Carolina	01	Not Applicable	This program proposed to offer transition services only to mixed income subjects. The job placement rates of the mixed income group subjects would have been compared to those of the nonmixed groups.

TABLE III-2 (Continued)

BRIEF DESCRIPTIONS OF THE 47 MIXED INCOME TESTS
FY 1978 and 1979
"The Super Matrix"
Region 5

Prime Sponsor	Test Site	Type of Test	Dates of Operation	Summary of Test
Completed Mixed Income Tests				
1. Ann Arbor, Michigan	Ann Arbor, Michigan	04	January to June 15, 1978	Five school sites in Ann Arbor were used to conduct this mixed income test with handicapped youth. Youth were not paired by income in job settings, but they did interact in the classroom. Results were that the handicapped youngster does benefit from such a program.
2. Fort Wayne, Indiana	Fort Wayne, Indiana	04	January to June 1978	This in-school program for high school seniors was designed to provide work-study opportunities for the hard-to-place student regardless of family income. The hard-to-place are usually physically or emotionally handicapped. Results were nonsignificant based on statistical analyses.
3. Indiana, BOS	Columbus, Indiana	01	March 1, 1978 to June 30, 1978	Transition services were provided to mixed income subjects. No conclusive data are available.
4. Lansing, Michigan	Lansing, Michigan	01	January to September 1978	Work experience and classroom training were key services delivered to subjects in this mixed income test. Subjects were mixed at job sites and in classrooms. The results are that control subjects (those not mixed) scored higher than the experimental subjects on pre- and post test measures of attitude, motivation, and the like. However, the experimental subjects showed more significant change in score from the pre- to the post-test.

TABLE III-2 (Continued)

BRIEF DESCRIPTIONS OF THE 47 MIXED INCOME TESTS
FY 1978 and 1979
"The Super Matrix"
Region 5 (Continued)

Prime Sponsor	Test Site	Type of Test	Dates of Operation	Summary of Test
5. Macon County, Illinois	Decatur, Illinois	01	January to June 1978	Potential dropouts were identified and enrolled in a work-study program. Participants were 14 and 15 years old and mixed in groups by income. Results are inconclusive.
6. Milwaukee, Wisconsin	University of Milwaukee (School of Allied Health Professionals)	03	April to September 1978	Participants received university-based instruction in the various allied health fields. This instruction was designed to deliver marketable skills. A very high attrition rate affected the conclusiveness of the findings from this mixed income test.
7. TRICO-CETA Consortium Racine, Wisconsin	Kenosha, Wisconsin	01	January to June 1978	In-school youngsters from income-eligible and nonincome-eligible families were mixed in an urban work-study program. Income-eligible youth seemed to improve better than nonincome eligibles regardless of groupings.
8. Ramsey County, Minnesota	Maplewood, Minnesota	04	Unknown	This test was designed to serve handicapped youngsters through counseling, on-the-job training and job placement. The test was discontinued shortly after it started, and there are no data.
9. Rockford Consortium	Harlam Board of Education, Illinois	02	March 15 to June 15, 1978	In-school youth participated in a work-study program. Pre- and post-measures were collected. Results have not been analyzed.
10. WOW Consortium	Waukesha, Wisconsin	04	January to June 1978	Handicapped youngsters at two sites were given a work-study experience in a mixed income setting. These subjects were compared to participants in Title I programs and the mixed income subjects showed more satisfactory performance.
Operating Mixed Income Tests 11. Lansing, Michigan	Lansing, Michigan	01	October 1, 1978 to September 30, 1979	This is a replication of the test conducted by Lansing in FY 1978. No data are available.

TABLE III-2 (Continued)

BRIEF DESCRIPTIONS OF THE 47 MIXED INCOME TESTS
FY 1978 and 1979
"The Super Matrix"
Region 5 (Continued)

Prime Sponsor	Test Site	Type of Test	Dates of Operation	Summary of Test
12. Indiana BOS	Columbus, Indiana	04	May 1, 1978 to September 30, 1979	An alternative school program is offered pregnant women in this mixed income test. No data are available.
13. Indiana State Employment and Training Council	New Castle, Indiana Blue River Valley School Corporation	03	June 1978 to September 1979	This in-school test involves an examination of 120 variables from the basic demographic to attitudes and levels of motivation. A major emphasis of the classroom and on-the-job work is on the acquisition of marketable skills. No conclusive data are available now.
14. Indiana State Employment and Training Council	Harmony School	03	April 1978 to April 1979	Emphasis is placed on improved academic performance of mixed income participants who are in an alternative school setting. Data analyses have not been completed.
15. St. Paul, Minnesota	St. Paul, Minnesota	01	January 1978 to September 1979	Part-time employment is provided as an incentive to remaining in school to mixed income subjects. All participants must be pursuing a high school diploma or its equivalent to remain active. Data were not systematically collected, and findings are inconclusive
16. Trico-CETA Consortium Racine, Wisconsin	Silver Lake, Wisconsin	01	October 1978 to September 1979	This is a replication of the FY 1978 test except that it is conducted in a rural setting. No data are available.

TABLE III-2 (Continued)

BRIEF DESCRIPTIONS OF THE 47 MIXED INCOME TESTS
FY 1978 and 1979
"The Super Matrix"
Region 6

Prime Sponsor	Test Site	Type of Test	Dates of Operation	Summary of Test
Completed Mixed Income Tests				
1. Coastal Bend Consortium	Corpus Christi, Texas	01	March to September 1978	This dropout prevention program was based in two schools. The first school was a traditional institution; the second was an alternative setting. No post-test was used, so findings are inconclusive. Change was observed in dress and attitude of participating youth.
2. Ouachita Parish Police Jury	Ouachita Parish, Louisiana	01	February to August 1978	This work study program aimed to provide a part-time job placement for each participant. No pre- or post-tests were used, but test personnel reported no differences in behavior in mixed or nonmixed groups.

TABLE III-2 (Continued)

BRIEF DESCRIPTIONS OF THE 47 MIXED INCOME TESTS
FY 1978 and 1979
"The Super Matrix"
Region 7

Prime Sponsor	Test Site	Type of Test	Dates of Operation	Summary of Test
Completed Mixed Income Tests				
1. Omaha, Nebraska	Omaha, Nebraska	02	January to August 1978	This career exposure program, managed by the Girls Club of Omaha, included counseling, guided group interaction, and on-the-job training. Participants were all female. Pre- and post-measures were used but were still being analyzed at the time of this report. Results will be available at a later time.
Tests Proposed But Never Implemented				
2. Wichita, Kansas	Wichita, Kansas	04	Not Applicable	Wichita had proposed an in-school program for handicapped youngsters. Fiscal problems prevented its implementation.

TABLE III-2 (Continued)

BRIEF DESCRIPTIONS OF THE 47 MIXED INCOME TESTS
FY 1978 and 1979
"The Super Matrix"
Region 8

Prime Sponsor	Test Site	Type of Test	Dates of Operation	Summary of Test
Completed Mixed Income Tests				
1. Arapahoe County, Colorado	Arapahoe County, Colorado	01	January to September 30, 1978	No pre- or post-tests were administered to program participants, so results are all speculative. There seemed to be a tendency for participants in the mixed income group to have more positive attitudes at termination from this work-study, in-school approach to the mixed income experiment.
2. Boulder County, Colorado	Boulder County, Colorado	04	January to September 1978	Handicapped and rural youth were placed in work experience situations and also received intensive one-to-one counseling in this test of the mixed income hypothesis. While there was no systematic testing or data collection, it was reported that this program filled a local need in exposing employers to the employability of handicapped and/or rural youth.
Operating Mixed Income Tests				
3. North Dakota BOS	Four Rural Communities	01	February to September 30, 1979	Participants in four rural sites are involved in community improvement projects. No pretests were used; post-tests are not planned. There are no results to report.

TABLE III-2 (Continued)

BRIEF DESCRIPTIONS OF THE 47 MIXED INCOME TESTS
FY 1978 and 1979
"The Super Matrix"
Region 9

Prime Sponsor	Test Site	Type of Test	Dates of Operation	Summary of Test
Completed Mixed Income Tests				
1. California, BOS	Placer County	01	February to September 1978	A variety of work experiences were provided in-school youth from six area high schools. Pre- and post-measures were used, and these data yielded no significant differences in attitude or motivation resulting from mixing by income.
2. Marin County, California	Corte Madera, California	02, 03	June to September 15, 1978	Mixed income subjects were engaged in a variety of counseling, educational and recreational activities during the test period in addition to a work assignment. Emphasis was placed on internal and external change. This test generated highly usable data, but there was no statistical significance observed.
3. Monterey County, California	Salinas, California	02	March to September 1978	This program was geared toward potential school dropouts and paired work experiences with academic instruction. The results were statistically insignificant.
4. Nevada BOS	Carson City, Nevada	01	January to June 1978	An alternative vocational education program was the main service provided to mixed income subjects in Carson City. It included counseling and work experience. However, no conclusive results can be presented.
5. San Diego, California	San Diego, California	01	January to June 1978	This in-school program had two to three months of work experience for each participant. Pre- and post-tests were used, but interaction between the income eligibles and the nonincome eligibles was almost absent. The results are highly inconclusive.

TABLE III-3

OVERVIEW OF THE EFFECTS OF INCOME MIXING IN YOUTH EMPLOYMENT TRAINING PROGRAMS

Region 2

Prime Sponsor	Test Site	Rating*	Comment
1. Niagara County, N.Y.	Niagara County Community College	+	This rating is based on observed increases in self-confidence. No systematic data are available.
2. Steuben County, N.Y.	Board of Cooperative Educational Services (BOCES) Wildwood Career Center	+	Dropout rate lower for test participants based on follow-up study.
3. Suffolk County, N.Y.	Suffolk County, N.Y.	0	All participants performed about the same.
Operating Mixed Income Tests 4. Suffolk County, N.Y.		uk	No follow-up information available.
No Information Available 5. New York City, N.Y.		uk	Insufficient information available.

* + = positive   0 = no effect
  - = negative   uk = unknown

TABLE III-3(Continued)

OVERVIEW OF THE EFFECTS OF INCOME MIXING IN YOUTH EMPLOYMENT TRAINING PROGRAMS

Region 3

Prime Sponsor	Test Site	Rating*	Comment
1. Northumberland, Pennsylvania	Northumberland County, Pennsylvania	+	Income eligible participants fared well though it is not clear this finding is related to mixed income grouping.
2. Virginia BOS	Prince George's County	+	Good interaction produced, and students were exposed to the world of work. However, no systematic data are available.
3. Virginia BOS	Virginia Employment Commission	uk	No data or "guesses" are available.
4. West Virginia BOS	Wheeling, West Virginia (West Virginia Northern Community College)	+	Income eligible participants fared well though it is not clear why.
5. Northumberland County, Pennsylvania	Northumberland County, Pennsylvania	0	This second test in Northumberland County led to the conclusion that mixed income grouping had no effect on income eligible participants.

61

*+ = positive 0 = no effect
- = negative uk = unknown

62

TABLE III-3 (Continued)

OVERVIEW OF THE EFFECTS OF INCOME MIXING IN YOUTH EMPLOYMENT TRAINING PROGRAMS

Region 3 (Continued)

Prime Sponsor	Test Site	Rating*	Comment
6. Virginia BOS	Bath County, Virginia	+	Self-confidence appears to increase as a result of program involvement.
7. Virginia BOS	Giles County, Virginia	+	The trend suggests that mixing helps increase the performance of the income eligible.
8. Virginia BOS	Stafford, Virginia	uk	The program ended abruptly, and no report has been made available to MBA.
9. Virginia BOS	Stephens City, Virginia	+	This rating is based on observational data only.
10. Schuykyll, Pennsylvania	Schuykyll-Carbon County, Pennsylvania	uk	Test never implemented.

* + = positive 0 = no effect
- = negative uk = unknown

TABLE III-3 (Continued)

OVERVIEW OF THE EFFECTS OF INCOME MIXING IN YOUTH EMPLOYMENT TRAINING PROGRAMS

Region 4

Prime Sponsor	Test Site	Rating*	Comment
1. Broward County, Florida	Broward County, Florida	0	Various analyses yielded no significant differences in performance based on participant groupings.
2. Tennessee BOS	Upper Cumberland, Tennessee	0	Analyses of data yielded no significant differences based on groupings of participants.
3. Middle Georgia Consortium	Robbins Air Force Base Macon, Georgia	uk	No follow-up information available.
4. Charlotte, North Carolina	Charlotte, North Carolina	uk	Test never implemented.

* + = positive
- = negative
0 = no effect
uk = unknown

TABLE III-3 (Continued)

OVERVIEW OF THE EFFECTS OF INCOME MIXING IN YOUTH EMPLOYMENT TRAINING PROGRAMS

Region 5

Prime Sponsor	Test Site	Rating*	Comment
1. Ann Arbor, Michigan	Ann Arbor, Michigan	+	The handicapped youngster seems to benefit from such a program.
2. Fort Wayne, Indiana	Fort Wayne, Indiana	0	Analyses of data yielded no significant differences based on groupings of participants.
3. Indiana, BOS	Columbus, Indiana	uk	No data or "guesses" are available.
4. Lansing, Michigan	Lansing, Michigan	+	Income eligible youngsters seemed to fare well in this program.
5. Macon County, Illinois	Decatur, Illinois	+	The trend suggests that mixing helps increase the performance of the income eligible.

* + = positive 0 = no effect
- = negative uk = unknown

TABLE III-3 (Continued)

OVERVIEW OF THE EFFECTS OF INCOME MIXING IN YOUTH EMPLOYMENT TRAINING PROGRAMS

Region 5 (Continued)

Prime Sponsor	Test Site	Rating*	Comment
6. Milwaukee, Wisconsin	University of Milwaukee (School of Allied Health Professionals	0	The high attrition rate seems to have impacted on the performance of all participants.
7. TRICO-CETA Consortium Racine, Wisconsin	Kenosha, Wisconsin	+	The trend suggests that the income eligible subjects do well in any group.
8. Ramsey County, Minnesota	Maplewood, Minnesota	uk	Test discontinued shortly after it started.
9. Rockford Consortium	Harlam Board of Education, Illinois	uk	Available data have never been analyzed by test administrators.
10. WOW Consortium	Waukesha, Wisconsin	+	More positive change noted in mixed income groups than in nonmixed groups.

* + = positive　　0 = no effect
- = negative　　uk = unknown

TABLE III-3 (Continued)

OVERVIEW OF THE EFFECTS OF INCOME MIXING IN YOUTH EMPLOYMENT TRAINING PROGRAMS

Region 5 (Continued)

Prime Sponsor	Test Site	Rating*	Comment
11. Lansing, Michigan	Lansing, Michigan	+	Income eligible youngsters seemed to fare well in this program.
12. Indiana BOS	Columbus, Indiana	0	No significant differences were observed in the performance of experimental or control subjects.
13. Indiana State Employment and Training Council	New Castle, Indiana Blue River Valley School Corporation	uk	Data have not been analyzed.
14. Indiana State Employment and Training Council	Harmony School	uk	Data analyses have not been completed.
15. St. Paul, Minnesota	St. Paul, Minnesota	uk	Data were not systematically collected nor analyzed.

* + = positive   0 = no effect

TABLE III-3

OVERVIEW OF THE EFFECTS OF INCOME MIXING IN YOUTH EMPLOYMENT TRAINING PROGRAMS

Region 5 (Continued)

Prime Sponsor	Test Site	Rating*	Comment
16. TRICO-CETA Consortium Racine, Wisconsin	Silver Lake, Wisconsin	uk	The trend suggests that the income eligible subjects do well in any setting. However, no follow-up data were available to support the trend.

* + = positive
- = negative
0 = no effect
uk = unknown

TABLE III-3 (Continued)

OVERVIEW OF THE EFFECTS OF INCOME MIXING IN YOUTH EMPLOYMENT TRAINING PROGRAMS

Region 6

Prime Sponsor	Test Site	Rating*	Comment
1. Coastal Bend Consortium	Corpus Christi, Texas	+	Participants did improve in attitude and dress.
2. Ouachita Parish Police Jury	Ouachita Parish, Louisiana	0	No significant differences were observed in the performance of experimental or control subjects.

* + = positive
- = negative
0 = no effect
uk = unknown

TABLE III-3 (Continued)

OVERVIEW OF THE EFFECTS OF INCOME MIXING IN YOUTH EMPLOYMENT TRAINING PROGRAMS

Region 7

Prime Sponsor	Test Site	Rating*	Comment
1. Omaha, Nebraska	Omaha, Nebraska	+	Career aspirations did increase for income eligible subjects.
2. Wichita, Kansas	Wichita, Kansas	uk	Test never implemented.

* + = positive
- = negative
0 = no effect
uk = unknown

TABLE III-3 (Continued)

OVERVIEW OF THE EFFECTS OF INCOME MIXING IN YOUTH EMPLOYMENT TRAINING PROGRAMS

Region 8

Prime Sponsor	Test Site	Rating*	Comment
1. Arapahoe County, Colorado	Arapahoe County, Colorado	+	Income eligible participants fared well though it is not clear why.
2. Boulder County, Colorado	Boulder County, Colorado	+	This program filled a local need to assist handicapped youth.
3. North Dakota BOS	Four Rural Communities	uk	No tests were administered, and sample sizes were too small to even "guess".

* + = positive
  - = negative
  0 = no effect
  uk - unknown

CHAPTER IV

THE STATE OF THE ART

This chapter is an assessment of the state of the art with respect to mixed income testing at the local prime sponsor level. MBA's approach to a state of the art includes not only an assessment of an overall performance level but reasons for that performance level as well. Chapter V of this document lists some specific recommendations for future mixed income tests which build on the state of the art described here.

The general state of the art of mixed income testing at the local prime sponsor level is very developmental and primitive. In two years of testing the mixed income hypothesis, results are still highly speculative and nonconclusive. Prime sponsors adhere to the requirements of the test with varying degrees of proficiency. Reports and data analyses were often not useful. There is no developing body of knowledge for reference that will document the relative effectiveness of one approach over another. There are no new questions emerging suggesting alternative tests and hypotheses. For these and other deficiencies MBA concludes that the state of the art is only beginning.

However, it is MBA's contention that a worthwhile process has been started that can be augmented to enhance the overall effort and advance the state of the art. Some of the reasons that the state of the art is primitive after two years are noted below.

Failure of Test Sites to Follow Directions

In far too many cases, test sites did not adhere to specific requirements established for the mixed income test. Some of these requirements included the use of pre- and post-testing, the use of control groups and the mixing of experimental subjects by income. MBA has concluded that many did not understand the conceptual nature of the mixed income test, nor did they understand the importance of standardized data collection. The state of the art can be improved if sites more adequately adhere to the experimental directives established by the Office of Youth Programs.

Variables of Interest Not Operationalized

Some sites appropriately chose to specify the attributes that they hoped to see change as a result of the mixed income interaction. However, few sites specified variables in operational or measurable terms. It is almost impossible to assess the qualitative changes predicted when those changes are not described in measurable terms.

Very Small Numbers of Subjects

One of the reasons that the results are inconclusive is that they are based on very small samples. In some cases 10 experimental subjects were compared to 100 control subjects. There is no magic number, but any sample size needs to be sufficiently large enough to account for attrition and perform meaningful data analyses.

Inappropriate Data Collection Strategies

Those sites that did implement pre- and post-testing often exercised very little control over the data collection process. Systematic testing and data analysis did not characterize most of the projects conducting mixed income experiments.

Inappropriate or Inadequate Test Instruments

Sites seemed to select test instruments in a haphazard method. The instruments sometimes were inappropriate or inadequate for the tasks at hand. Furthermore, very little comparison could be made from one test site to another because each site selected its own measurement tools.

Inadequate Program Length

Many of these tests were in operation for only three to six months. This is probably not enough time to produce the kinds of effects expected from mixed income grouping.

Insufficient Follow-up

Finally, MBA found almost no systematic follow-up of mixed income test subjects after the test was completed. Whatever effect mixed income grouping produced cannot be documented to be long lasting or have carry-over into other relationships. This is unfortunate and again emphasizes the developmental aspect of the state of the art of mixed income testing.

Chapter V provides some recommendations that, if implemented, could enhance the conduct of mixed income testing.

CHAPTER V

RECOMMENDATIONS

The mixed income experiments as devised by the Youth Employment and Demonstration Projects Act were specifically intended to find answers to difficult questions about the effective grouping of youngsters in employment and training programs. These experiments were planned to test whether and/or to what extent income-eligible youth benefit from working with and being trained alongside nonincome-eligible youth. Unfortunately, as the findings in Chapter III reveal, no definitive conclusions can be drawn at this time regarding the mixed income hypothesis. MBA has suggested in Chapter IV of this report some reasons for this lack of conclusiveness in these tests.

In this final chapter of the report on the status and results of the 1978 and 1979 mixed income tests, MBA is proposing a number of recommendations that, if implemented, could enhance the quality and level of experimental rigor and control in future mixed income testing. The mixed income hypothesis merits further investigation, and MBA agrees that the pretest/post-test control group research design is the preferred technique for such an investigation. Within this context, MBA recommends further consideration of the following elements for inclusion in subsequent mixed income experimentation.

- Variables
- Controls for Attrition
- Controls for Confidentiality
- Standardized Pre- and Post Instruments
- Standardized Follow-up
- Standardized Length of Program Involvement

Each of these elements is discussed as follows.

Variables

Sex of Participant

A variable that emerges in much of the manpower literature is the sex of the participant; however, the significance of the sex variable in job training and job performance is not clear. Results have been controversial. Nevertheless, sex as a variable should be included in the mixed income tests simply by requiring that the participants be equally divided between males and females in all sites undertaking mixed income experiments.

Age

Experimental and control subjects in mixed income tests should be matched for age.

Level of Interaction Between Participants

All programs need to provide a measure of the interaction between participants. The basic contention regarding mixing youth by income implies that interaction between these youths from different income groups is crucial. The level of interaction should be specified in any site conducting a mixed income test.

Type of Program

Two types of programs should be included in future experiments. Programs for both in-school and out-of-school youth should be devised and specified consistent with services generally found at the demonstration sites.

Ratio of Income-Eligible to Nonincome-Eligible Participants

The basic contention of these studies is that mixing participants by income will effect program performance. A secondary variable is the type of ratio most useful. The ratio of income-eligible to nonincome-eligible participants should be specified and maintained throughout any test.

Extent of Income Differential

Two ranges of income difference are proposed for future mixed income studies. These ranges are based on the Lower Living Standard Income Level (LLSIL). At the present time, income eligibility for youth program participation is cut off at 85 percent of the LLSIL. For future tests it is recommended that at least two ranges of income difference be examined. The first range is 125 percent--175 percent of the LLSIL; the second range is 175 percent and above of the LLSIL. In all cases, an exact income figure should be required for all experimental and control subjects.

Controls for Attrition

It is well known that the attrition rate in YETP projects across the country can be as low as ten percent and as high as fifty percent. Any site undertaking a mixed income test should consider the typical attrition rate for its respective program and enroll subjects for the mixed income test accordingly.

Controls for Confidentiality

Confidentiality is very important in these tests because of the need for income data and the need to decrease the possibility of experimental contamination resulting from too many people knowing about the test. Confidentiality with the income data can be provided through whatever usual channels are used in each prime sponsor. The nature of the test and the identity of the experimental and control subjects need to be protected as diligently as possible. The manner in which confidentiality will be treated should be stated in mixed income test proposals.

Standardized Pre- and Post-Instruments

It is recommended that all sites engaging in mixed income tests be instructed to use the same pre- and post instrument to measure basic attributes of interest. The test package devised by the Educational Testing Service should be considered, though it is long and may be a burden to smaller prime sponsors. A shorter package can be selected that will allow for the possibility of meaningful comparison across all sites conducting mixed income tests. Sites would be encouraged to use whatever other instruments they deem appropriate to the particular needs of their service mix.

Standardized Follow-up

All sites should be required to conduct a follow-up of mixed income test experimental and control subjects at three- and eight-month intervals. The purposes of the follow-up are many; specifically, one is to determine how long any effects produced by the income mixing persist.

Standardized Length of Program Involvement

Any prime sponsor electing to conduct a mixed income test should be prepared to maintain the services for experimental and control subjects for at least six months. Not much effect from mixing can be expected from programs running the test for a shorter period.

APPENDIX A

CASE STUDIES

APPENDIX A

CASE STUDIES

Each of the 47 tests proposed for FY 1978 or FY 1979 are described in the following case studies. The case studies are grouped by region, and no order in merit or value is implied by their position in this appendix.

The reader is referred to Table III-2 in Chapter III for a listing of the sources of data for each case.

Suffolk County, New York; Northumberland County, Pennsylvania; Indiana BOS; Lansing, Michigan; and Trico-CETA Consortium in Racine, Wisconsin, are each reported in one case study. The reader will note from Table III-2 that each of these prime sponsors conducted two mixed income tests, either one in each fiscal year or two concurrently. The one case study describes both tests.

NEW YORK CITY, NEW YORK

New York City proposed a mixed income experiment for FY 1978, but a determination of program conduct and results is not possible at this time because of unsuccessful attempts to interview program operators. The following is an account of their proposed effort.

The program was to involve two program activities--career employment experience and classroom training. They proposed to have an experimental group that would provide interaction between participants from the two income groups, and a control group consisting of only income-eligible subjects.

Services to participants were to include career counseling, occupation information and referral, and various placement services.

NIAGARA COUNTY, NEW YORK

Introduction

A number of specialized services were provided for physically handicapped youth in a mixed income environment. The findings were fairly inconclusive because data collection strategies were not specified.

Test Approach

The mixed income test at Niagara County, New York was conducted by the Niagara County Community College, a subcontractor to the local CETA prime sponsor. This test, conducted between July 24 and September 15, 1978, was designed to provide training and work experiences for handicapped youth.

The experimental and the control groups served the same number of participants for a total of 32 subjects. The control group contained only income-eligible handicapped youth who were 16-21 years old. The experimental group contained 8 income-eligible and 8 nonincome-eligible handicapped youth in the same age group.

The services rendered by Niagara County were extensive and included special transportation and other facilities for the handicapped. Counseling was conducted on an individual and group basis. Experimental subjects and control subjects did not interact with each other.

Data Collection Strategies

The number of unsubsidized placements obtained by those in the experimental group was compared to the number of placements obtained by the control group and other factors, such as the program completion rate, the placement rate, the number of dropouts, and the amount of other special attention required were measured. It was believed that pre- and post-tests were administered, but the extent of these tests was not reported. Some follow-up was conducted at regular intervals.

The data from this test of the mixed income hypothesis are inconclusive. However, it was reported to MBA that the greatest outcome of this experiment was that it increased self-confidence in the participants and provided an opportunity to help handicapped youth adjust to a typical work setting.

Analysis

This test applied the standard mixed income hypothesis to a special population--the physically handicapped. Positive change for income-eligible subjects was measured in several ways relevant to job placement, program retention and the like. Other kinds of positive change, such as self-concept, motivation and so forth, were not operationalized. Pre- and post-test procedures were not described. Impact of mixed income grouping on the income eligible was not adequately measured by this mixed income test, and a quantitative assessment of mixed income grouping for handicapped youth cannot be determined.

STEUBEN COUNTY, NEW YORK

Introduction

Alternative educational experiences and exposure to the world of work were the services that mixed income test subjects and controls received in Steuben County, New York. A follow-up completed one year later suggests a lower than average dropout rate implying that mixed income grouping had some benefit for participants.

Test Approach

Steuben County is a rural community located in the lower end of central New York State, halfway between the state's east and west borders. Farming and medium size industry are the major avenues of employment here. The County Manpower Administration subcontracted its mixed income test to the Wildwood Career Center, part of a two-county (Steuben and Allegany) Board of Cooperative Educational Services (BOCES).

From February to June 1978, 24 students participated in a program emphasizing the development of vocational skills and basic academic skills at the Wildwood Career Center. Of these 24 subjects, 12 were experimental subjects (6 income eligible and 6 nonincome eligible) and 12 were control subjects.

Data Collection Strategies

A Behavioral and Progress Report was used to assess the students' behavior retrospectively and to devise a baseline from which to gauge future assessments. Post-tests used a similar instrument, and a follow-up was completed in early May 1979 to determine the current status of the 24 participants.

One year later, ten of the original twenty-four subjects were still active in a BOCES program, eight were working full time, and six had left school. Whether these were the income-eligible subjects in the mixed or nonmixed group setting was not made clear.

Respondents from the prime sponsor's office and the subcontractor's office felt that the findings were not conclusive in supporting the hypothesis that income mixing had a salutory effect on income-eligible participants. Their reasons were:

- It was not possible to pair participants as completely as desired
- There was a limit to the variety of work sites available for placement, and full matching was not always possible at work sites
- February to June was not sufficient time to conduct the test
- The language of the original DOL proposal was not as clear as would have been helpful

Within these limitations, respondents felt that generally positive effects were achieved. The very existence of a special project gave a "boost" to staff; it enabled the program to include a new unit in their teaching in the form of a tour of local industries, and it gave students an opportunity to learn about the world of work through experience.

Analysis

Variables were not clearly stated in this test of the mixed income hypothesis, and the retrospective approach to collecting pretest data violates test requirements. Results are not reported separately for subjects in mixed groups and nonmixed groups, so the effect of mixed income grouping cannot be specified. The use of follow-up one year after program completion is commendable, but these data need to be reported in a more usable fashion.

SUFFOLK COUNTY, NEW YORK

Introduction

Several variations were used to explore best mix in terms of the grouping of participants, the experiences provided and/or the wages offered. Out-of-school youth received job experiences in these tests of the mixed income hypothesis. Mixed income groups did not fare better than nonmixed on key measures.

Test Approach

Two tests of the mixed income hypothesis are described in this case study of Suffolk County, New York. Suffolk County is on the tip of Long Island, and it is a mixture of residential and recreational areas, with a seaside view. Farming and light industry provide employment, and many work in nearby Nassau County or New York City.

FY 1978 Test

From February to September 1978, the CETA prime sponsor in Suffolk County conducted a test of the mixed income hypothesis. This first study examined three variations of the mixed income hypothesis. These were:

(1) Income mixing will result in greater program benefits to income-eligible youngsters.

(2) Income mixing and higher wages will increase the productivity, motivation, retention rate and transition into unsubsidized employment for the income eligible.

(3) Income mixing and intensive individualized counseling will result in greater program benefits to income-eligible youngsters.

Fourteen experimental subjects were compared to 14 control subjects in the FY 1978 test. The ratio of income eligible to nonincome eligible is not clear.

FY 1979 Test

A similar test is being conducted in Suffolk County during FY 1979. However, more subjects are included to promote greater data analysis. The control group is composed of 120 subjects, and the experimental group has 120 subjects (40 in each of the above variations). The ratio of income eligible to nonincome eligible is not known.

Data Collection Strategies

Pretests were not used in either of these approaches to the mixed income hypothesis. Post-tests did examine work quality and quantity, dependability, attendance, initiative, courtesy and attitude in the FY 1978 test.

The second variation of the hypothesis used in FY 1978 was not confirmed. As a matter of fact, the group paid less money had a significantly lower absentee rate than the group receiving higher wages. All other data are nonconclusive primarily because the sample size in the FY 1978 test was small.

No results were available on the FY 1979 test at the time of this report.

Analysis

The two variations of the hypothesis proposed by Suffolk County are interesting, but they may distract from the major need to examine the effects of income mixing. Indeed, the results regarding income mixing are inconclusive and probably confounded by the other variables under investigation.

NORTHUMBERLAND COUNTY, PENNSYLVANIA

Introduction

Classroom training and work experience were combined with career counseling in this mixed income test. Participants were exposed to three occupational categories in mixed pairs of income-eligible and nonincome-eligible youth. Results for the first year of this test showed income-eligible youngsters performing better than the nonincome-eligible youngsters.

Test Approach

This case study on Northumberland County describes mixed income tests conducted in FY 1978 and FY 1979. The effective dates for the FY 1978 test were January 16 through September 30, 1978, and the FY 1979 program started October 1, 1978 and will run through September 30, 1979. The program design in both tests provided classroom training and a variety of work experiences to mixed income groups of subjects.

Thirty-six students participated in the FY 1978 program. Twenty-four of these were in the experimental group (12 income-eligible youth and 12 nonincome-eligible youth). A control group was established that consisted of 12 income-eligible youth. Participants from both groups were recruited from three local educational agencies that conducted the initial screening of applications. All income verification was conducted through the use of parental/guardian forms.

Participants chosen for both groups were matched as closely as possible for their work site assignments, based on sex, race, education attained and grade point average. It was noted that, while an attempt was made to have income-eligible and nonincome-eligible participants work alongside each other, this was not always possible.

Data Collection Strategies

Periodic progress reports measuring the amount of change in each participant were prepared by the work site supervisors. Participants completed self-evaluation forms and questionnaires at various intervals throughout the course of program operations. These data were evaluated by the staff to gauge the overall effectiveness of the program. Ultimately, these evaluations will be used to facilitate rational decisions in an effort to improve student learning in the YETP program.

Analysis

The results of the FY 1978 demonstration showed that income-eligible youth worked "as good as" to "better than" nonincome-eligible youth. This conclusion was unexpected by the staff and was a factor in their decision to continue the research in FY 1979. The FY 1979 program will hopefully shed some light on why the nonincome eligible are not performing as expected. There are no results to report on the effects of income mixing.

The Northumberland County Manpower Administration viewed the mixed income tests as "good" (as opposed to "very good" or "excellent"). In their assessment the validity of test results was questionable due to inadequate controls and dubious research criteria. It was learned from the interview that no pre- or post-test was administered, and the amount of interaction within the experimental group may not have been sufficient to produce the expected impact.

MBA is reluctant to call the tests "good" because neither of the tests is really looking at the mixed income hypothesis. These tests are comparing the performance of the income eligible to the nonincome eligible in a typical YETP project, and this is totally contrary to the mixed income hypothesis.

SCHUYKYLL-CARBON COUNTY, PENNSYLVANIA

Introduction

This proposed ten percent component was to be incorporated into the prime sponsor's in-school work experience program. In 50 percent of the in-school work sites, participants from income-eligible and nonincome-eligible backgrounds were to be mixed, while the remaining 50 percent of work sites would serve only income-eligible youth, who would serve as the control groups.

Test Approach

The following issues were to be examined in this mixed income approach:

- The value of integrating participants with varied family income levels and backgrounds
- The relative cost-effectiveness of different program approaches for target grouped participants
- The effects of program opportunities on the prospects of unsubsidized youth employment and school completion
- The value of work generated by mixed income grouped employees

The total number of slots in the mixed income component was to be 410. Of this number, 102 slots were allocated to nonincome-eligible youth, who would be mixed with 103 income-eligible youth, and 205 slots were allocated to the control group, all of whom were income eligible.

Data Collection Strategies

Follow-up procedures would be geared toward tracking and evaluating the above-stated criteria. In addition, follow-up procedures for the in-school component would incorporate school completion/retention data so that the objectives of an outcome study could be obtained.

Analysis

This ten percent demonstration program was never initiated in Schuykyll-Carbon County because of problems in getting grant applications approved. However, this is probably just as well in the MBA opinion because too many variables and concepts were not operationalized, and the proposed approach to data collection was not targeted.

VIRGINIA BALANCE OF STATE
BATH COUNTY

Introduction

This work-study program is designed to provide potential school dropouts with a viable alternative to traditional classroom instruction. Participants receive classroom training in Adult Life Skills on the premise that these skills can be translated into other kinds of changes. As a result of exposure to this program, participants are expected to develop more independence and responsibility and have greater interest in becoming gainfully employed.

Bath County, a rural community in Warm Springs, Virginia, is a popular resort area in the summer months. Resort areas, the school system and a garment factory employ most of the residents.

Test Approach

The Bath County School Board, a subcontractor to the Virginia Balance of State for the mixed income test, started its program in February 1978 and is continuing it through September 30, 1979.

This mixed income test was integrated into the Bath Youth Community Improvement Project (BYCIP), an alternative education project for potential dropouts. The ultimate goal of BYCIP is for each participant "to gain attention, success and recognition in constructive rather than destructive ways."

The program started with 5 nonincome-eligible participants and 15 income-eligible participants. At the time of MBA data collection, there were 2 nonincome-eligible and 17 income-eligible participants. The total number of

103

participants has vacillated between 17 and 2[illegible]. This variance can be attributed to subject loss either through dropout or positive termination.

The majority of participants in the program are white males ranging from 15 to 19 years old. All have demonstrated an inability to function adequately in a regular high school setting. One respondent also noted that many participants come from homes experiencing special difficulties.

Data Collection Strategies

Specific indicators of change observed are academic behavior and performance, personal behavior and cooperation, and some measure of cumulative change. Academic change is measured numerically; personal behavior is measured by teacher/supervisor evaluations. These two categories are totaled to give a net growth pattern for each individual participant.

Although no pretest was administered and no post-test is anticipated, case studies on each individual are prepared by school staff at the time of entry to the program, and intermittent evaluations serve to update this information. A comprehensive post evaluation is completed for each student at termination.

Analysis

The program is ongoing, and results have not been completely analyzed. However, these preliminary findings were noted:

- The alternative program has provided students with a needed sense of "identification" or "group cohesiveness" that may have helped keep them in school
- As students become actively involved in project tasks, there is an observable rise in their sense of self-esteem. Many students have a low self-concept when they first enter the program

This test fails to meet research requirements established by the Department of Labor for conducting mixed income experiments. These requirements include pretesting and using control groups, each of which is critical when it comes to assessing the effectiveness of mixed income grouping. Although this test may have helped Bath County confront some of the needs of its nonincome-eligible youth, it does not yield much information on mixed income grouping.

VIRGINIA BALANCE OF STATE
GILES COUNTY

Introduction

An alternative to typical school instruction is provided to 30 participants in the "PATS" (Positive Approach to School) program. Eight of the 30 are income eligible, 8 are nonincome eligible and 14 are control subjects. Progress is based on physical appearance, test scores and job-related behaviors. Income-eligible youth in the mixed setting appear to be progressing better than youth in the nonmixed setting. Data are very inconclusive at this time, however, because the test is still operating.

Test Approach

Giles County, a rural community in Pearisburg, Virginia, is 70 miles from Roanoke. Unemployment in general, and youth unemployment in particular, is high and problems of drug and alcohol abuse exist. These problems are not limited to low-income youth and are reasons for conducting the mixed income test. The Giles County School Board was the subcontractor to the Virginia Balance of State for this mixed income test.

Youngsters who cannot function in the regular high school setting are placed in the PATS program based on their special needs and their potential for improvement. It is within the framework of the PATS program that the present mixed income experiment is being conducted. This mixed income test started in October 1978 and will run through September 1979.

The typical PATS program provides academic training, vocational training and counseling to participants. Of the 30 PATS slots available, 16 were allocated to the mixed income experimental group. Eight of these were income eligible, and 8 were nonincome eligible. The remaining 14 served as control subjects. Participants are periodically measured on a number of attributes to determine progress.

Data Collection Strategies

Participant progress is based on demonstrated improvement in physical appearance, attendance, academic performance, vocational performance, use of wages and commitment. Pre- and post-tests were used that measured these attributes. Because the program was still operating at the time of MBA's data collection, no definitive findings were available. It appears, however, that income eligibles are progressing as well as the nonincome eligibles. It further appears that those income-eligible subjects in the mixed group are progressing better than those in the nonmixed group.

Analysis

The test managers in Giles County have conformed to the requirements established for conducting a mixed income test. The data necessary to analyze the effects of mixed income grouping will be available. The orientation of the test managers does not seem consistent with the dictates of the mixed income test and causes some concern. Too much emphasis was placed on comparing the income eligible to the nonincome eligible. This should be corrected and data should be analyzed based on the effects of mixed income grouping as opposed to nonmixed income grouping for income-eligible subjects.

VIRGINIA BALANCE OF STATE
PRINCE GEORGE'S COUNTY

Introduction

A summer work experience was provided to income-eligible and nonincome-eligible youngsters. However, no data were collected on a pre or post basis on which to develop any conclusions.

Test Approach

Three services were rendered to the participants during this test of the mixed income hypothesis. These were an orientation session on job skills prior to job placement, individual and group counseling, and training and employment.

The Prince George's mixed income test began June 12, 1978 and lasted until September 9, 1978. Neither pre- nor post-tests were administered during the experiment to measure variables or change. Furthermore, students, employers and staff were aware that the experiment was in operation. Nonincome-eligible subjects knew that ten percent of the YETP funds had been set aside to give them employment that they ordinarily would not have been entitled to receive.

Data Collection Strategies

There were no pre- and post-tests used in this mixed income design. Observations were used, and it was noted that interaction in the experimental group was high between the income-eligible and nonincome-eligible subjects.

Analysis

There can be no meaningful quantitative analysis of this test of the mixed income hypothesis because no data were collected. This test also violated requirements by not using a control group of subjects. This test did help students adapt to the world of work and gain insights into potential employment opportunities. It did not, however, meet the major established requirements for a mixed income test.

VIRGINIA BALANCE OF STATE
STAFFORD COUNTY

Introduction

An in-school work-study program was subcontracted to the local school board. Testing or prescreening was not done. However, there is a 1:1 ratio of student to supervisor, and anecdotal reports are made at frequent intervals. Results are inconclusive because the test is still in operation.

Test Approach

This FY 1979 test of the mixed income hypothesis provides classroom instruction, on-the-job training and placement to 30 participants. Twenty-seven of these are income-eligible youth and three are nonincome-eligible youth. Students were selected by random sampling, and all income verification was done by the Virginia Employment Commission.

Data Collection Strategies

Two variables are being used to determine participant change. These are work attitude and attendance. It is not clear how these variables are systematically measured, but subjective evaluations on each participant are conducted about once a month.

Analysis

None of the research requirements was followed in this test of the mixed income hypothesis. Neither pre- nor post-[illegible]s were used, no control group was used, and the small percentage of nonincome-eligible subjects suggests very little chance of meaningful interaction between income-eligible and nonincome-eligible subjects. This test is still in operation but will probably not yield any meaningful results with respect to the mixed income hypothesis when completed.

VIRGINIA BALANCE OF STATE
STEPHENS CITY

Introduction

Income eligibles and nonincome eligibles are mixed in a nontraditional vocational school setting in this test of the mixed income hypothesis. Pre- and post-tests were not used; however, the observation of personnel associated with the test is that the mixing is not causing any difference in the behavior of income-eligible subjects.

Test Approach

The Dowell J. Howard Joint Committee for Control is the subcontractor to the Virginia Balance of State for this test of the mixed income hypothesis. Dowell J. Howard is a vocational school providing alternative education experiences for youth who have demonstrated an inability to function in traditional school settings. This test, which started in October 1978 and will continue through September 1979, is designed to meet the needs of nonincome-eligible youth who would benefit from the program services they would otherwise be ineligible to obtain. The mixed income subjects received the same services ordinarily rendered by the school.

The participants in the demonstration program were all in-school youth at the junior high school level. All students had demonstrated an inability to function in the traditional school setting, and a majority have been labeled "problem children." Total enrollment in the ten percent component as of April was 32, 29 of whom were income eligible and 3 of whom were nonincome eligible. This proportion varies as students are terminated from the program and others are added.

The program offered for the ten percent component provides both classroom learning and work experience. The general distribution of participant activity is half academic learning and half work experience. Classroom courses include reading, math and general academic subjects. The work experience component operates on a rotating basis with participants spending nine weeks at a job site. In this manner each student is exposed to a wide variety of career opportunities.

Data Collection Strategies

No pretests were administered to the test participants and no post-tests are anticipated. However, all students were required to take the "ABLE" test, which gave individual academic ratings. Observational data have been used to assess attitude, punctuality, attendance and general sense of responsibility. No conclusive results can be reported at this time.

Analysis

The ten percent component operating in Stephens City is lacking in many of the elements essential to a research design. The absence of pre- and post-test instruments and a control group make any results highly questionable. It seems that the real objective of this program was to serve a larger population rather than to test the mixed income hypothesis, so any findings are suspect. One tentative finding is that mixed income grouping is causing no difference in performance. This may be because so few nonincome-eligible subjects were used in this test.

VIRGINIA BALANCE OF STATE
VIRGINIA EMPLOYMENT COMMISSION

Introduction

This test of the mixed income hypothesis was essentially a program to expose youth of all income levels to the world of work. Convocations and workshops were held at area high schools, but no data were collected.

Test Approach

From January to June 1978, graduating seniors from Wise and Lee Counties were exposed to basic knowledge and information necessary to prepare for, locate and obtain jobs in a one-day transition course. This program was conducted in conjunction with Mountain Empire Community College and used "mobile learning labs" for the implementation of the course. It was estimated that a total of 345 seniors participated in this one-day effort at meaningful career exposure.

The one-day program consisted of presentations and discussions on career opportunities and development, and information packets were distributed to all participants to review. Each subject completed an attitudinal survey form, which served as the evaluation tool utilized in completing the analysis for this experiment. However, no systematic data were collected on income, so the percentage of nonincome eligible served is not known.

Data Collection Strategies

There were no systematic data collection strategies, and even the attitudinal survey administered was not analyzed. Pre and post measures were not features of this test.

Analysis

This was not a test of the mixed income hypothesis. It did provide a one-day approach to a multitude of job possibilities and training opportunities, but it did not examine the mixed income hypothesis.

WEST VIRGINIA BALANCE OF STATE
WHEELING, WEST VIRGINIA

Introduction

This program provided out-of-school youth with skilled training in major appliance repair on the campus of the local community college. Pre- and post-testing and three follow-ups were key approaches to data collection. Income-eligible youth performed better than nonincome-eligible youth in either the mixed or nonmixed group. The follow-up is continuing on these subjects.

Test Approach

This test of the mixed income hypothesis was subcontracted to the West Virginia Northern Community College and was conducted from March 1 to September 30, 1978. The program was designed to provide participants with classroom training in major appliance repair. This concentrated effort was to provide in-depth knowledge and extensive work experience to participants resulting in fully qualified repair technicians upon completion of the program. All activities took place on the campus of West Virginia Northern Community College utilizing the faculty staff.

Thirty-two students participated in this FY 1978 demonstration program. Sixteen were in the control group (all income-eligible youth), and the remainder formed the experimental group (eight nonincome eligible and eight income eligible). The local job service was responsible for all intake procedures, including income verification. Each student was then interviewed by college staff and final selections were made. The job service staff, college administration and faculty were knowledgeable of the nature of the research being conducted, but the participants were unaware of any testing.

Data Collection Strategies

Two basic techniques used to measure change were pre- and post-testing and follow-up to determine the nature of program termination. The pre- and post-test used was the Tennessee Self-Concept Scale, which measures motivational levels, attitudes and self-concepts. The student's scores on the pre- and post-tests were compared to determine whether the student's attitudes about work and his motivation had been positively influenced. These tests also indicated any differences existing between the experimental subjects and control subjects.

The number of students successfully completing the program was measured against the original total enrollment. The number of students employed will be measured at three intervals after program completion: immediately, six months later and one year later.

In addition to these two strategies, subjects were given the opportunity to evaluate the program activities every four weeks throughout their participation. Even when a subject left the program, a participant evaluation was requested.

Analysis

Overall results to date indicate that the income-eligible youth in the control and experimental group functioned "as well as or better than" the nonincome-eligible youth. However, no data are available regarding the effects of mixed grouping which suggests strongly that the basic thrust of the mixed income test was missed in this study.

BROWARD COUNTY, FLORIDA

Introduction

In this test of the mixed income hypothesis, youth apprenticeship training in retail sales or printing was paired with guided group interaction. Multivariate analyses were calculated and yielded no statistically significant differences based on participant groupings.

Test Approach

From March 1 to September 30, 1978, 70 subjects participated in the mixed income study in Broward County, Florida. Eighteen of these were nonincome eligible. No control subjects were used.

Participants were divided into two groups. One group attended a retail sales class and nine hours per week of guided group interaction; the other group attended a printing and graphic arts class and nine hours per week of guided group interaction. Each group was mixed by income and observed over the course of the project.

Data Collection Strategies

Pre- and post-test instruments were used that were designed to tap a number of attitudes such as motivation to work, career aspiration and self-concept. Follow up of placement and later success was also a data collection strategy used in the Broward County test of the mixed income hypothesis. No statistically significant differences were found in the two groups of subjects.

Analysis

This test of the mixed income hypothesis violated the requirements established by the Department of Labor. No control group was used in this study, and the distribution of subjects by training class is not clear. However, the pre and post data collected were amenable to sophisticated statistical analysis, and this is a big plus. MBA believes that, with a control group added, this test could prove more enlightening with respect to the workability of the mixed income hypothesis.

CHARLOTTE, NORTH CAROLINA

Charlotte proposed to conduct a ten percent mixed income test but never implemented it. The proposed program would have provided transition services for mixed income youth. The job placement rates of the mixed income group subjects would have been compared to the job placement rates of subjects not in mixed income groups.

MIDDLE GEORGIA CONSORTIUM

Introduction

An Aerospace Careers and Exploration program is being conducted at the Robbins Air Force Base in middle Georgia. This test started in FY 1978 and will conclude in FY 1979. It provides skilled training and counseling to out-of-school youth. Data are inconclusive until completion of the program operation.

Test Approach

The mixed income test program or the Aerospace Careers and Exploration program at Robbins Air Force Base provides full-time employment and training opportunity for 30 youth. Work teams are assigned to work sites representing approximately 20 occupational groups such as mechanical, food services, clerical and laboratory/technical.

In addition to on-the-job training at the work sites, youth receive instruction in preparation for the GED examination, and counselors provide help and advice with personal, family and legal problems. Counseling consists primarily of one-on-one assistance, and periodic group counseling sessions are scheduled for rap discussions.

Data Collection Strategies

Program applicants were tested with the Stanford Diagnostic, a career interest profile and a series of interviews. These are the basic predata. No post-test was administered, but there was follow up to determine the extent of unsubsidized employment following program involvement.

While the bottom line was unsubsidized employment, it was difficult to get trainees onto the appropriate Civil Service Register and virtually impossible to identify those who were registered. Work site supervisors had wanted to provide regular full-time positions at the end of the training program but were precluded from doing so because of the register constraints.

Analysis

This is an interesting approach to employment development and certainly an excellent way to utilize the resources of the local air force base. However, because data collection did not employ the best strategies, no definitive results are available. It is not clear that a control group was used, nor is it clear that the mixed income hypothesis was tested in this program.

TENNESSEE BALANCE OF STATE
UPPER CUMBERLAND, TENNESSEE

Introduction

This summer program consisted of a variety of work experiences for out-of-school youth. Pre and post data were collected and analyzed, but these data yielded no statistical significance with respect to the mixed income hypothesis.

Test Approach

The ten percent demonstration program was conducted in FY 1978 by the Cordell Hull Economic Development Corporation (CHEDC) and the Upper Cumberland Human Resources Agency (UCHRA) as subcontractors to the Tennessee Balance of State. The two subcontracting agencies followed an identical program design but provided different types of work experience. This program was operated from July through September 1978 and was designed to provide out-of-school youth with a variety of work experiences.

All participants were recruited for and referred to the project by the Department of Employment Security Offices, and all income verification was done by these offices. Original total enrollment (for both subcontracting agencies combined) was 104, but eventually this was reduced to 88 subjects because of attrition.

The experimental group was comprised of a two-to-one ratio of nonincome-eligible to income-eligible youth, and the control group consisted of income-eligible youth exclusively. An attempt was made to match subjects in the control and experimental groups with respect to age, sex, marital status, school grade completed, grade point average, race and income.

The UCHRA subjects were employed at various work sites, including a nursing home, a county courthouse, a day care center, the Upper Cumberland Human Resource Agency and Tennessee Tech. The CHEDC subjects were employed in day care centers throughout the counties. Work experience was the only service provided to test participants in this mixed income program.

Data Collection Strategies

The pre- and post-test instrument was a questionnaire designed by members of the Manpower Planning Section of the Tennessee Department of Employment Security. This questionnaire consisted of four sections covering work history, work attitudes, vocational training history and occupational awareness. The section on work attitudes was the most closely examined and analyzed. In addition, natural observation was used by supervisors and interviewers who made periodic reports on participants' progress. The measurement of overall work attitudes was obtained by comparing the pre- and post-test answers posed on the questionnaire in this section. Statistical analyses involved the utilization of the t-test for determining the significance of the difference between means of matched groups. No statistical significance was observed in these data using the t-test analysis.

Analysis

This test of the mixed income hypothesis did adhere to the established research requirements. However, no statistical significance was observed.

This may be because the test period was too short and control subjects were added fairly late in the research effort. This test should be replicated with corrections for those observed problem areas.

ANN ARBOR, MICHIGAN

Introduction

Five school sites in Ann Arbor were used to conduct this mixed income test with handicapped youth. Youth were not paired by income in job settings, but they did interact in the classroom. Results indicated that the handicapped youngster does benefit from such a program.

Test Approach

This mixed income test was conducted over a five-and-a-half-month period from January to mid-June 1978. The program provided work experience, classroom instruction, counseling and supportive services to 19 participants. It was implemented within five separate schools of the Ann Arbor school district.

The test group had ten slots and was equally mixed between income-eligible and nonincome-eligible handicapped youth. The handicapped students were emotionally disturbed and/or developmentally disabled youth. The control group consisted of nine in-school youth who were income eligible and not physically or mentally handicapped. The experimental group was built from referrals of local school special education teachers. Income was not verified, but local residency and in-school status were verified.

The work experience of the participants consisted of part-time career employment, which averaged 15 hours weekly for a 15-week period. Many different work sites were utilized, and, because attainment of work site commitments was difficult for the handicapped population, no attempt was made to pair income-eligible and nonincome-eligible students while on the job. Classroom instruction included career orientation and labor market information. Counseling services were provided as were supportive services, such as medical and transportation assistance. Interaction between income-eligible and nonincome-eligible students, when it occurred, was only in the classroom setting.

Data Collection Strategies

No pre- or post-testing was conducted. The staff did evaluate participant progress on the basis of attendance records, employer performance evaluations, academic work, duration of placement and reasons for termination. None of this information was systematically examined by income grouping.

The results of this test very clearly show a positive effect for the handicapped youngster. On measures of attendance, academic performance and positive termination, handicapped participants fared quite well.

Analysis

Despite the good results reported, this test did not provide an adequate demonstration of the effects of mixing youngsters by income. It demonstrated that handicapped youngsters could achieve, but, since they were not compared to other handicapped youngsters, the effects of mixing by income are unknown. This particular test did demonstrate the high motivation to succeed among the handicapped, but it should not be considered a good test of the mixed income hypothesis.

FORT WAYNE, INDIANA

Introduction

This in-school program for high school seniors was designed to provide work-study opportunities for the hard to place student regardless of family income. The hard to place are usually physically or emotionally handicapped. Results were statistically nonsignificant.

Test Approach

The overall purpose of this mixed income demonstration test was to study perceptual judgments of participants about education, acceptance of self and others, and superior-subordinate relationships when income-eligible clients were mixed with nonincome-eligible clients. This mixed income test was an in-school program conducted from January to June 1978. High school juniors and seniors were the subjects. Control and experimental groups were used.

The program, entitled "Cooperative Work-Study Placement," was designed to provide training station placement for hard to place students. The nonincome-eligible participants were required to meet the program's nonincome-related criteria, such as being physically handicapped or in need of an opportunity to prove themselves and willing to commit themselves to regular attendance in the program.

The program services included paid employment at a job site and classroom instruction. Work experience included 15 to 20 hours of employment per week under the guidance of the nonprofit employing agency's regular supervisors. Typical sites were public schools, city and county offices, child care centers and hospitals. The participants in the experimental group were paired at the work sites according to mixed income whenever possible. Classroom instruction was under the tutelage of vocational teacher-coordinators. According to the CETA staff, the greatest amount of interaction between income-eligible and nonincome-eligible participants occurred within the classroom. The experimental group also received special counseling attention not received by the control group. This counseling was in regard to career choice, human relations, superior-subordinate relations and self-concept reinforcement.

Data Collection Strategies

Pre- and post-tests were used that measured subject perception of education, self-worth and superior-subordinate relationships. Evaluation data were gathered using standard CETA program criteria. Several statistical tests were performed, including the analysis of variance. No statistically significant findings resulted, however, and CETA planning staff suggested that descriptive statistics, rather than inferential statistics, might have been more useful. They also mentioned the short length of the project (six months) as a possible factor in the lack of significant results and suggested a project length of at least 12 months as more appropriate.

Analysis

In this test of the mixed income hypothesis, as in others reported here, information that would affect future YETP planning was not developed. No conclusive findings can be reported. Furthermore, this test violated one of the requirements of the mixed income experiments since the experimental group received more services than the control group. The only difference between the two groups should have been in the composition of members; all other services were to be identical.

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INDIANA BALANCE OF STATE

Introduction

This report covers two tests of the mixed income hypothesis conducted by the Indiana Balance of State prime sponsor in Columbus, Indiana. The FY 1978 test provided transition services to mixed income subjects, and it yielded no conclusive findings. The FY 1979 test provided an alternative school program for pregnant women; no definitive data are available on the FY 1979 test.

Test Approach

The FY 1978 test provided a number of "transition to the world of work" services to high school students. These were job seeking seminars, skills training activities and actual job placement. The number of participants involved and the ratio of income eligible to nonincome eligible was not known.

The FY 1979 test is providing the same transition services to a special group of subjects. These subjects are all enrolled in an alternative school for pregnant women. The number of participants and the ratio of income eligible to nonincome eligible is not known.

Recruitment for program participation was handled through newspaper ads, announcements in the schools and simply by word of mouth. Family incomes were verified by requesting that parents submit paycheck stubs and by spot checking.

Data Collection Strategies

Pre- and post-tests were used, but it is not clear what variables and/or attributes were measured by these tests. No results were available to MBA at the time of this study.

Analysis

There was not enough information available to MBA to analyze the effectiveness of either of these tests of the mixed income hypothesis.

INDIANA STATE EMPLOYMENT AND TRAINING COUNCIL
BLUE RIVER VALLEY SCHOOL CORPORATION

Introduction

This in-school test involves an examination of 120 variables from those related to demography to attitudes and levels of motivation. A major emphasis of the classroom and on-the-job work is on the acquisition of marketable skills. No conclusive data are available now.

Test Approach

Forty-five youth were included in this test program. Nineteen were nonincome eligible with family incomes ranging from $10,500 to $22,500. Twenty-six of the youth were income eligible with families having no measurable income. The subjects were divided into two program groupings by age. Fifteen subjects were in grades 7 through 9, and another 15 were in grades 10 through 12. An additional 15 youth served as controls receiving the same services as subjects except they were not mixed by income.

Students were chosen for participation in the program based on recommendations from teachers and guidance counselors. Selection criteria included students' poor academic performance, their potential for dropping out of school and/or their involvement with the juvenile criminal justice system. Students with poor self-concepts, low communication skills and little interest in the school system's traditional offerings were sought. All participants were interviewed by a counselor, psychologist and the Program Director before final selection.

The demonstration training program combined remedial academic education with a work experience for dropout-prone youth.

Data Collection Strategies

Over 120 variables of interest were identified and tracked. These variables included age, sex, grade placement, and type and amount of family income. The six major changes measured were types of termination, changes in academic level, changes in school attendance performance, changes in grade point average, graduation rate and supervisor work site performance ratings. Pre- and post-tests were used along with examinations of school records and work site supervisor evaluations.

Data were still being collected and analyzed at the time of the MBA investigation. However, some preliminary findings were presented which are intriguing and suggest the need for additional study.

- Some performance measures are going to be statistically significant when the analysis is complete
- A noticeable growth is apparent for all subjects in problem-solving abilities
- All subjects (income eligible and nonincome eligible) appear to have gained from the mixed income experiment, and the growth of the income-eligible youth does not appear to have been at the expense of the growth of the nonincome-eligible youth

Analysis

This test of the mixed income hypothesis was elaborate and interesting. However, the sample size seemed to be much too small to adequately examine change in 120 variables. A larger sample size is recommended in any proposed replication of this test of the mixed income hypothesis.

INDIANA STATE EMPLOYMENT AND TRAINING COUNCIL
HARMONY SCHOOL

Introduction

Harmony School, an alternative high school, provided a number of services to participants in this mixed income test conducted from April 1978 to April 1979. Emphasis was placed on improved academic performance.

Test Approach

Harmony School was already comprised of a heterogeneous group of students mixed by income, so 41 of these students (ages 14 and over) were selected as subjects. The experimental group was mixed by income, and only income eligibles were in the control group.

Services provided to the participants included family counseling, emergency housing, academic classes and transportation.

Data Collection Strategies

Pre- and post-tests were administered to measure changes in verbal and math skills resulting from the experiment. Results were not analyzed at the time of the MBA investigation, but three observations were shared with the MBA staff:

- Verbal and math skills increased in five percent of the participants
- Attendance increased in ninety percent of the participants
- Income-eligible and nonincome-eligible subjects seemed to benefit from the mixed income setting

Analysis

Insufficient information was provided to MBA to adequately complete this analysis. For instance, neither the ratio of income-eligible subjects to nonincome-eligible subjects nor the extent of income difference was known. The nature of the pre and post instruments used was not described. Without this information, it was difficult to assess the quality of this test of the mixed income hypothesis.

LANSING, MICHIGAN

Introduction

This report covers two tests of the mixed income hypothesis conducted by the CETA administration in Lansing, Michigan. Work experience and classroom training were key services delivered to subjects in the FY 1978 test. Subjects were mixed at job sites and in classrooms. The results were that control subjects (those not mixed) scored higher than the experimental subjects on pre- and post-test measures of attitude, motivation and the like. However, the experimental subjects showed more significant change in scores from the pre- to the post-test. The FY 1979 test is a replication of the 1978 effort, and no results are available.

Test Approach

The FY 1978 mixed income program was run from January to September 1978 under a subcontract with the Lansing School District. Two high schools served as sites; one high school served only the control group (all income eligible), and the second provided the setting for the experimental group (mixed income). The control group contained 30 youth, and the experimental group had 34, who were equally mixed with income-eligible and nonincome-eligible youth.

The FY 1979 test is very similar. However, it has an additional control group that is provided no training. This group will help account for the percentage of change due to intervening variables from the environment or chance.

The mixed income component provided basic services similar to those in other YETP programs. These services were outreach, orientation, assessment, career-related work experience, transition counseling, career information, personal counseling, skill training and placement on unsubsidized jobs.

Interaction between the income-eligible and nonincome-eligible youth occurred at the job sites and during classroom training. Participants were paired at the work sites so that income eligibles were working with nonincome eligibles.

The program participants, particularly the "influence group" of nonincome-eligible youth, were selected through referrals from school counselors at the two high school sites. The income range of the nonincome-eligible youth was from $10,000 to as high as $40,000. The youth were aware of being part of a demonstration program but were unaware of the nature of the test.

Data Collection Strategies

Pre- and post-tests were used to measure changes in attitudes about self and work, levels of motivation, job seeking skills and general career awareness. The participants' grade point averages were examined, and a follow-up was conducted. The findings from the FY 1978 study were interesting.

- Members of the control group had higher scores on the pre- and post-tests of attitude toward work, motivation toward work and knowledge of job seeking skills than did members of the experimental group

- The amount of change from pre- to post-test was more significant among members of the experimental group than the control group
- The grade point average of the experimental group dropped while that of the control group rose slightly

There are no results to report from the FY 1979 test.

Analysis

The results of this test must be weighed against the small sample size and the limited time period (one school term). There was also little control in regard to intervening variables, and it was difficult to substantiate outcomes by virtue of economic mix or no mix. An additional and important factor to consider was the use of two high schools that may be two very different environments in terms of educational philosophy and teaching skills; these differences could have been a primary reason for the unusual growth of the control group. These learnings gained from the FY 1978 mixed income test are being examined more critically in the FY 1979 test.

MACON COUNTY, ILLINOIS

Introduction

Potential dropouts were identified and enrolled in a work-study program in this FY 1978 test of the mixed income hypothesis. This test was conducted between January and June 1978, but it yielded inconclusive results.

Test Approach

The Work Experience and Career Education Program (WECEP) was designed to provide potential school dropouts aged 14 and 15 with opportunities for part-time employment and career education. Counseling and training in career development, life skills and job skills were additional features of the program. The goal of the WECEP was to reduce the number of 16-year-old dropouts. WECEP was the subcontractor for this test of the mixed income hypothesis. The local public school district provided program coordination, classroom instruction and assessment services; CETA provided work experience, career counseling and supportive services.

The youth in the mixed income demonstration, as participants in the overall WECEP, received all the above services. Sixteen youth were in the test program. Eleven, almost equally mixed between income eligible and nonincome eligible, formed the experimental group; five income-eligible youth served as the control group. The nonincome-eligible participants were from families in the middle to upper middle income range. All participants were selected on the basis of high absenteeism from high school.

Data Collection Strategies

The program was focused on improving the participating youths' self-concepts and attitudes toward school. The results of the demonstration were measured by attendance at school, grade point average, discipline in school and at work, and on-the-job work performance. Information to measure the above items was gathered from school records, CETA forms, on-the-job supervisors and pre- and post-tests.

The findings were inconclusive with respect to the mixed income hypothesis, but they were interesting in other areas. For instance, it was found that 82 percent of the subjects in the experimental group showed an increase in grade point average compared to only 40 percent of those subjects in the control group. Work attitudes and attendance rates increased for both groups, and the number of disciplinary cases was reduced for both groups.

Analysis

This test, like many others reported in this study, suffered because of its very small sample size. The research requirements were adhered to, but the small sample size made it almost impossible to achieve results of any significance.

MILWAUKEE, WISCONSIN

Introduction

Participants received university-based instruction in the various allied health fields. This instruction was designed to deliver marketable skills. A very high attrition rate affected the conclusiveness of the findings from this mixed income test.

Test Approach

The Milwaukee experiment combined classroom training with work experience. The University of Milwaukee, School of Allied Health Professions, was the subcontractor for the classroom training. Youth and Elderly Together--Project Involve, a local chore service agency, was the subcontractor for the work experience component. Both subcontractors were located in center city Milwaukee.

There were 56 participants in the program, 31 of whom were in the experimental group and 25 of whom were in the control group. The Youth and Elderly Together agency performed all of the application/intake procedures and assisted the local job service agency in verifying income levels. A wide range of difference in students' income levels was not reported. Final selection of all participants was handled jointly by the University and Youth and Elderly Together. How participants were distributed in terms of income eligibility was not known.

Classes were held on the university campus from May through July 1978. Subjects were provided with approximately 100 hours of training

(15-22 hours per week) in four skill areas: nursing, health maintenance, home economics and interpersonal learning. This training was intended to provide students with skills that they could use in the work experience component.

The work experience component provided individual placement for participants in the homes of elderly persons where they could practice and improve the skills acquired in training. Assignments included chore service, housekeeping, meal preparation and personal services. Other participants made visits to elderly citizens and arranged social and recreational activities (most notably an end-of-the-program picnic for youth participants and elderly clients).

Data Collection Strategies

Measurement of change in attitude and attainment was based on a questionnaire that served as both pre- and post-test. The questionnaire consisted of true/false questions concerning general employment-seeking activities and some specific requirements for employment in the field of allied health. The pretest was administered to all participants upon entrance into the program. Although an attempt was made to have both the pre- and post-test questionnaire data collected on each individual, many participants were not queried a second time because they dropped out of the program. Other students refused to complete the questionnaire at program termination.

A final research report was not available; however, some observations and preliminary results were shared with MBA. For one thing, students who were nonincome eligible seemed to have career aspirations and knowledge about how to achieve them. Income-eligible youth had similar aspirations but lacked the resources and knowledge necessary for achievement. In addition, for all subjects, job placement after the program was very high. Seventy-one percent of the participants had a positive termination and job placement.

Analysis

The Milwaukee mixed income test program was structured to meet the research requirements. However, the results of the program may not be statistically significant due to the amount of participant turnover. Furthermore, coordination between the two subcontractors was poorly handled and may account for the inconclusive findings from this test of the mixed income hypothesis. A future test of the mixed income hypothesis in Milwaukee should emphasize decreasing the attrition rate and should consider only one subcontracting agency.

RACINE, WISCONSIN
TRICO-CETA CONSORTIUM

Introduction

This case study reports on tests of the mixed income hypothesis conducted by the Trico-CETA Consortium in FY 1978 and FY 1979. The FY 1978 test involved in-school youngsters from income-eligible and nonincome-eligible families who were mixed in an urban work-study program. The income-eligible youth seemed to improve more than the nonincome eligible regardless of groupings. The FY 1979 test is essentially a replication of the FY 1978 test in a rural setting. No data are available.

Test Approach

The characteristics of the FY 1978 and FY 1979 test program participants were similar: the youth were primarily white males, 15 or 16 years old. Both test programs were for in-school youth. The family income range for the nonincome-eligible subjects in the FY 1978 program ranged from just over CETA income guidelines to $40,000. In contrast, the family income for all the nonincome-eligible participants in the FY 1979 test program was just over CETA eligibility guidelines by $1,000 to $2,000.

The FY 1978 test had an experimental group of 30 subjects equally mixed between income eligible and nonincome eligible and a control group of 15 income-eligible youth. The FY 1979 experimental group had 13 participants, 5 of whom were nonincome eligible.

The program provided in-school youth with transitional services and career employment experiences. The staff described the program as an employability techniques learning and skills development effort geared toward job seeking and job maintaining.

The mixed income test program combined a variety of employment and training-related services from a workshop that provided classroom training in employability skills development to on-site work experience. Participants began their on-the-job experience while participating in the classroom-type workshop. Job sites included post offices, local schools and handicapped centers where the youth were often employed in maintenance or aide positions. In both tests of the mixed income hypothesis, an effort was made to pair an income-eligible youth with a nonincome-eligible youth at the work site. Pairs were determined by similarity in age, sex and work interest. This feature of the test program was more successfully incorporated into the FY 1979 program than it was in the FY 1978 program.

Data Collection Strategies

Techniques used to measure change were pre- and post-tests and observation. The pre- and post-tests used for the demonstration programs were developed by the Education Division of the Singer Company as part of an employability techniques package for program deliverers called Job Survival Skills Program for Independent Living. It uses true/false questions that measure attitudes and beliefs about communication techniques, the importance of education and resources available for job seeking and maintaining. Observation of participant performance and attitude change was conducted on several different levels from the subcontractor staff to counselors and workshop leaders to participants' supervisors at the work sites. Work performance and attitude were measured through observations of behavior such as regularity of attendance, punctuality and changes in quality of work. Classroom performance and attitude were measured through observations of such behavior as amount of participation and preparation and revelations regarding self-concept.

The mixed income staff noted few differences between the income-eligible youth and the nonincome-eligible youth. The youth of the higher income families were described as neater in appearance and more courteous, but the results of the FY 1978 test showed little difference in performance or attitude between the two groups. The staff stressed that the employment and training needs of both income groups were the same. A difference between the FY 1978 and FY 1979 program participants, they said, is that the rural youth have additional drawbacks in that their area has less industry and no public transportation to those jobs that are available. The FY 1979 test may yield more significant findings. No data were reported on the effects of mixed income grouping.

Analysis

These tests of the mixed income hypothesis adhered to the research guidelines established by the Department of Labor. However, they both failed to demonstrate anything significant about the effects of mixed income grouping. In both tests, the sample size may have been too small to adequately measure change, and in the FY 1979 test the income difference was very small. In both tests there seemed to have been no real focus on the effects of grouping; more emphasis seemed to be on comparing income-eligible youngsters to nonincome-eligible youngsters.

RAMSEY COUNTY, MINNESOTA

Introduction

This test was designed to serve handicapped youngsters through counseling, on-the-job training and job placement. The test was discontinued shortly after it started, and there are no data.

Test Approach

Twenty-five slots were to be provided, almost equally mixed between income eligible and nonincome eligible. Services were to include job site development, counseling and on-the-job training. This program, however, apparently met with a number of problems, and, according to a prime sponsor representative, it was discontinued shortly after initiation. The exact dates of operation are unknown.

Data Collection Strategies

There was no information on how data were collected

Analysis

There was not enough information available to MBA to analyze the effectiveness of this test of the mixed income hypothesis.

ROCKFORD, ILLINOIS

Introduction

In-school youth participated in a work-study program. Pre and post measures were collected. Results have not been analyzed on this FY 1978 test of the mixed income hypothesis.

Test Approach

The mixed income test program was designed for in-school youth and was conducted from March 15 to June 15, 1978. The program was conducted in several classrooms of one school district. The participating students were provided with career awareness and self-awareness/self-esteem training and on-the-job work experience. Work experience was primarily with private sector employees.

Eligibility for CETA income-eligible participants was determined by prior eligibility in the school district's lunch program. Nonincome-eligible youth were selected through referrals from school counselors. Basic criteria included poor attendance and/or grades and were used to identify youth having problems in school. Thirty nonincome-eligible and 15 income-eligible youth participated in the mixed income program. The subject group was mixed in the classroom setting; the control group attended similar classes but at a different time. The youth were unaware of the demonstration nature of the program as were the on-site employers; only the teachers were aware of the test being conducted.

Data Collection Strategies

Program participants were administered Coopersmith's "Self-Esteem Inventory," Rosenberg's "Self-Esteem Scale" and the Norwicki-Strickland "Locus of Control for Children" as pre- and post-tests. While specific variables of interest were not identified, the primary focus was increased self-concept in regard to the world of work. Increased performance at school and the acquisition of a job were additionally desired behavioral outcomes. Another technique for data collection was the use of self-administered questionnaires and document review of CETA and school records.

Data collected for the mixed income test have not been collated and analyzed separately from that of the total YETP program. Prime sponsor representatives mentioned lack of funds and lack of awareness of outside interest in the test results as the reasons that these data have not been analyzed. It may be pertinent to note, however, that there was little to no growth measured by the pre- and post-tests administered to the YETP population. The prime sponsor's annual report stated that "a person's self-concept is a personality trait which remains relatively stable over time."

Analysis

Many of the research requirements were met by this test of the mixed income hypothesis. However, the failure to analyze the data specifically generated by this test was a serious oversight. This failure made it impossible for the Rockford CETA to offer any conclusive results regarding the mixed income hypothesis.

ST. PAUL, MINNESOTA

Introduction

This FY 1978 and 1979 test of the mixed income hypothesis provides part-time employment as an incentive to remaining in school. All participants must be pursuing a high school diploma or its equivalent to remain active. Data were not systematically collected, and findings are inconclusive.

Test Approach

Independent School District #625 was the subcontractor for the FY 1978 and 1979 mixed income test in the city of St. Paul. The school district established the Center for Youth Employment and Training (CYET), which functions as a central coordinator for all youth manpower services. Services of the CYET are the Youth Employment and Training Program for dropout youth; the Youth Community Conservation and Improvements Project for out-of-school youth; the Youth Career Exploration and Employment Project; and the state and Federal St. Paul Summer Program for Economically Disadvantaged Youth. CYET also refers youth to Job Corps, the Young Adult Conservation Corps and other youth-oriented community organizations.

In this test of the mixed income hypothesis spanning two fiscal years, particular emphasis is placed on communicating to youth the importance of education in securing future employment. This is done by requiring that all participants stay in a school program in order to qualify for youth employment. The work experience provided is fully subsidized for up to 20 hours per week in nonprofit and governmental agencies.

The general distribution of participant activity is 20 hours per week of classroom training and 20 hours of work experience. The program provides a number of alternative education modes for out-of-school youth. After enrollment, all participants are required to actively pursue completion of high school through either attending a traditional high school, enrolling for a General Equivalency Diploma (GED) through St. Paul public schools, or attending an alternative school program.

The work experience consists of part-time employment at minimum wage in nonprofit and governmental agencies in the areas of maintenance, child care and clerical work. All work sites conduct initial interviews with the youth and explain the nature of the job requirements. If a particular type of work presents a conflict of interest with the participant, the project staff attempts to find an alternate placement for that youth. All participants receive career development counseling, various supportive services and referral to outside sources for special services as needed.

The mixed income program participants are racially mixed (white, black, oriental, native American and Spanish American) and are from ages 16 to 21. All are school dropouts. All participants seem to have a sense of alienation from the educational system, from work and from the home environment. Family incomes spanned a range from $100 above the usual income requirement to over $35,000. The number of subjects and composition of the experimental and control groups were not reported to MBA.

Data Collection Strategies

The subcontractor is responsible for maintaining an academic profile of each mixed income participant as well as conducting monitoring activities at each work site about once every two weeks. Work performance and attitude are observed through behavior such as punctuality, personal appearance and changes in quality of work, and academic progress is measured by attendance and improvement in grade point average.

Results of the mixed income test are described in terms of participant change. The observed changes were an increase in participants' positive self-concept, improvement in personal appearance and improvement in the participants' willingness to accept the responsibility of steady employment.

Analysis

Many elements germane to a rigorous research design were not included in the program. For instance, there were no control group, no pre- or post-tests and little income mixing. Respondents felt that this program delivered essential services to youth in an effective and efficient manner, but the program did not test the mixed income hypothesis.

WAUKESHA, WISCONSIN
WOW CONSORTIUM

Introduction

Handicapped youngsters at two sites were given a work-study experience in a mixed income setting. These subjects were compared to participants in Title I programs, and the mixed income subjects showed more satisfactory performance.

Test Approach

Fifteen subjects participated in this study of the mixed income hypothesis. Five of these subjects were income eligible, and these youth were in close and constant interaction with nonincome-eligible subjects. All were handicapped.

The program offered vocational technical training in food service and automotive repair. The group also developed a nature center at the high school.

Data Collection Strategies

Outcomes were measured by successful completion of the program and attainment of employment. Measurement was based on performance outcomes of the participants, and little use was made of pretests. An unexpected and highly desirable program outcome was that the class of handicapped youth became a much more integral part of the student body and the behavior of the students toward members of the special education class was much improved.

Analysis

This test did not meet the research requirements established by the Department of Labor. There was no control group, and systematic pre- and post-tests were not used. The sample size was small, and the test stipulated few additional controls. This program may have provided some job opportunities for handicapped youth in Waukesha, but it was not a test of the mixed income hypothesis.

COASTAL BEND CONSORTIUM

Introduction

This dropout prevention program was based in two schools. The first school was a traditional institution. The second was an alternative setting. No post-test was used; therefore, findings are inconclusive. Change was observed in dress and attitude of participating youth.

The Coastal Bend Consortium encompasses about 450,000 people, and half of these live in the city of Corpus Christi, Texas. The other half are distributed throughout the 12 rural counties that are also a part of the Coastal Bend Consortium. The mixed income test was subcontracted to the Corpus Christi Independent School District.

Test Approach

The format of the mixed income test was the traditional work-study program with the addition of career counseling. From March 1 to September 30, 1978, 56 participants received four hours of work experience and four hours of classroom training and counseling each day. Half of these were nonincome-eligible subjects. Each participant received academic credit and a minimum wage for time spent at the work site.

Data Collection Strategies

All participants in the mixed income study took a vocational interest inventory designed to facilitate program placement. The inventory was not used as a pretest instrument, and there were no post-tests used.

However, counselors and other program staff observed participant progress and looked for indicators of change such as attitude, interview behavior and other job-related skill acquisition such as the completion of application forms. Observers tried to get a sense of participant initiative and confidence.

Because data collection was unsystematic, there are no conclusive findings to report. The impressions provided by counselors and other staff are that attrition was somewhat lower for the mixed income group, that there was change in dress and attitude, and that nonincome eligibles seemed to benefit overall more than the income eligibles.

Analysis

This test of the mixed income hypothesis violated the research requirement of the administration of a pre- and post-test. Therefore, there are no quantitative data to report. It is also not clear whether subjects were matched on such variables as age and ethnicity. For instance, in at least one of the schools used for this study, all the income-eligible youth were Hispanic, and all the nonincome-eligible youth were white. The impact of cultural differences was not measured or even considered.

OUACHITA PARISH POLICE JURY

Introduction

This work-study program aimed to provide a part-time job placement for each participant. No pre- or post-tests were used, but test personnel reported no differences in behavior in mixed or nonmixed groups.

Test Approach

Ten participants composed the mixed income group (6 nonincome eligible), and 22 participants (all income eligible) were included in the control group. These youth received various services while participating in the mixed income test. The services included outreach, assessment, orientation, counseling, career information and guidance, job placement and job site monitoring. The test ran from February 1978 to the end of August 1978.

Data Collection Strategies

Methods employed to measure outcomes were attendance, attrition rates, nonpositive terminations, and attitudes and habits as observed by counselors and supervisors. Pre- and post-tests were not administered, and on-the-job interaction observed between the two income groups could not be used as a measure because the town was not large enough to have industries capable of employing more than one student.

Although the interaction between income eligibles and nonincome eligibles could not be observed at job sites in this test of the mixed income hypothesis, the general feeling expressed by staff and counselors was that there were no differences in the behavior of mixed or nonmixed group participants. Furthermore, observers found that income-eligible participants, regardless of the grouping, had more nonpositive program terminations than did the nonincome-eligible participants.

One other interesting observation was related to the effects of job site placement. Students employed at job sites away from the school seemed to acquire more maturity than those students employed by the school. Exposure to another facility seemed to be an important difference for these participants in the mixed income test.

Analysis

The failure to use pre- and post-tests seriously decreases the conclusiveness of this test of the mixed income hypothesis. Furthermore, the mixed income hypothesis cannot be truly tested since income-eligible and nonincome-eligible youth did not interact on job sites, and it is not clear what the interaction was like between the two in other activities. All data reported above are highly impressionistic and cannot be considered reliable indicators of the effects of this test.

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OMAHA, NEBRASKA

Introduction

This career exposure program, managed by the Girls Club of Omaha, included counseling, guided group interaction and on-the-job training. Participants were all female. Pre and post measures were used but were still being analyzed at the time of this report. Results will be available at a later time.

Test Approach

The Girls Club of Omaha, as a subcontractor to the Omaha CETA program, provided a Career Awareness program to in-school girls, aged 16 to 19, from January to September 1978. One hundred four subjects participated in this program, and they were evenly divided between the experimental and control groups. Unfortunately, it is not clear how subjects were distributed by income groups. The experimental subjects (52) are those who participated in the Career Awareness program; the control subjects (52) had no involvement in the Career Awareness program.

The Career Awareness program included group counseling and interaction, lectures and discussion, all of which were geared toward exposing girls to the many options available to them in the world of work. Decision-making skills were emphasized in these group activities.

Each experimental subject completed a needs assessment phase, which concluded when she developed a personal contract for goals to attain during the program period. This contract noted career areas of interest and highlighted potential placement possibilities.

Each experimental subject completed a three-week intern period at a business or professional setting related to the subject's interests. These intern placements were always in facilities with female role models at all levels of the business.

Data Collection Strategies

Experimental and control subjects were given pre- and post-tests using the American College Testing Program's "Assessment of Career Development" instrument. Prior to exposure to the Career Awareness program, experimental and control subjects were fairly similar on measures of job values, working condition preferences, career plans and career planning knowledge.

Though data are still being analyzed, a preliminary analysis indicates that experimental subjects do appear to become more responsible and independent in terms of career planning after the Career Awareness program. Control subjects do not show similar changes. However, there has been no analysis of these data by income group.

Analysis

This test of the mixed income hypothesis was carefully constructed and implemented. Data regarding income distribution are available to the test administrators, but these have not been analyzed. It is not possible to confirm or reject the mixed income hypothesis based on the Omaha test.

The administrators of this test rated it very highly and expressed confidence in the workability of the mixed income hypothesis. They noted that the addition of nonincome-eligible participants was good and was a boost to the Career Awareness program.

WICHITA, KANSAS

The mixed income test proposed for FY 1978 was never actually operationalized because of delays in funding. An attempt at program initiation was made in April, but it was abandoned in May at the close of the school term. The program enrolled only six participants during this interval and offered no services. There are no results to report.

ARAPAHOE COUNTY, COLORADO

Introduction

This test of the mixed income hypothesis was perceived as a way to include nonincome-eligible youth in a typical YETP activity. Although no pre- or post-tests were administered to program participants, there seemed to be a tendency for participants in the mixed income group to have more positive attitudes at the termination of this work-study, in-school approach to the mixed income experiment than participants in the nonmixed group.

Test Approach

This program was designed to provide participants with career employment experience, on-the-job training, counseling and transition services. The program was conducted from January through September 30, 1978, during which time 28 students participated in the mixed income test. Fourteen of these were income eligibles who formed the control group, and there was a mix of 14 income and nonincome eligibles in the experimental group. All income verification was conducted through parental/guardian intake forms.

All students were interviewed individually prior to final selection Selection was based on "matching sample" criteria, including age, sex, position in family and family status.

The program provided participants with on-the-job training and career employment experience in local public service agencies. The youth were closely matched according to the selection criteria--age, sex, position in family and family status--and the experimental group worked side by side at the job sites.

Data Collection Strategies

No pre- or post-test was administered to participants. Besides the initial screening interview, the only data collected were those gathered from an exit interview conducted by the same person who had interviewed the student previously. The exit interview was used to determine changes in attitude and motivation resulting from the program. The test administrators and counselors were knowledgeable of the research effort while students and supervisors were unaware of any testing.

The overall results showed a tendency for the experimental group to have a higher positive termination rate, although all youth were equally interested in continuing to hold down a job. It is implied that the experimental group fared better on termination because of its mixed income composition.

Analysis

This test of the mixed income hypothesis, like many others, suffered from poor data collection strategies, unclear variables and a small sample size. However, the matching of participants was carefully planned, and there was a high level of interaction achieved between participants in the mixed income group.

BOULDER COUNTY, COLORADO

Introduction

In this test of the mixed income hypothesis, handicapped and rural youth were placed in work experience situations and also received intensive one-to-one counseling. Although there was no systematic testing or data collection, it was reported that this program filled a local need in exposing employers to the employability of handicapped and/or rural youth.

The Boulder County CETA serves about 180,000 people in the city of Boulder and the rural and mountainous areas surrounding the city. This community is the home of the University of Colorado and is only 23 miles from Denver. Although unemployment is not high, underemployment is a problem since the cost of living is high and wages are low.

Test Approach

The Boulder County mixed income test was conducted from January to September 1978 and was unique in its focus on handicapped and rural youth. The handicapped youth were placed in work experience situations, and they received intensive one-to-one counseling and exposure to career education. This portion of the experimental program was implemented through a contract with the Center for People with Disabilities, a local organization that is geared to providing jobs for handicapped youth and adults. The focus on rural youth was to fill a severe need in Boulder County for jobs and services for this population. The lack of local businesses and governmental and human service delivery agencies serving as work sites severely impairs work assignments for rural youth. This portion of the experimental program was implemented through a contract with the Nederland Community High School, and these participants received services similar to those provided to the handicapped youth.

Data Collection Strategies

There were no pre- or post-tests administered. However, data were collected informally regarding program success, employment and the like. The most significant change observed was in the employers, who were able to see handicapped and rural youth as potentially reliable employees.

Analysis

This was not a test of the mixed income hypothesis. As far as MBA can gather, there was no mixing by income or even condition, that is, handicapped participants apparently worked only with each other, and rural participants worked only with each other. Pre- and post-tests were not administered, and even the observational data were not systematic. This program did respond to some special needs in Boulder County, but it adds no information on the effects of mixed income grouping.

NORTH DAKOTA BALANCE OF STATE

Introduction

This FY 1979 test of the mixed income hypothesis is being conducted in four rural communities under the auspices of the North Dakota Balance of State CETA office. Participants are involved in community improvement projects.

Test Approach

Each of the four communities participating in this study has six youth involved. In two of the communities, all of the youth are income eligible (these are the control subjects); in each of the two remaining communities, youth are mixed on a 1:1 ratio by income, that is, one-half of youth are income eligible and the other half are nonincome eligible. Family income was screened to determine income eligibility.

Each group of youth works with adults to plan and implement a project that will benefit the total community. Youth also receive training and vocational counseling in the course of their involvement in the community improvement project.

Data Collection Strategies

There were no pretests used, and no post-tests are planned. Impressionistic data are meager and nonconclusive. Everyone connected with the test is aware of its operation, but no one is collecting data to determine the outcomes.

Analysis

This test conducted by North Dakota is not a good example of a test of the mixed income hypothesis. Data collection is nonexistent, and the quality of the interaction between income-eligible and nonincome-eligible youth is questionable.

CALIFORNIA BALANCE OF STATE

Introduction

A variety of work experiences was provided to in-school youth from six area high schools. Pre and post measures were used, and these data yielded no significant differences in attitude or motivation resulting from mixing by income. This test was conducted by Placer County under subcontract to the California Balance of State prime sponsor from February to September 1978.

Test Approach

The Placer County program was designed to provide a variety of work experiences to in-school youth. A total of six high schools representing three school districts participated in the program. Participants in the experimental group worked in mixed income groups at job sites; control group subjects were not in mixed income groups.

There were 15 work sites situated in various locales within the county. Most of the sites were schools, but there was also a day care center, library, social security offices and an association for retarded persons. There were 32 subjects in the experimental group, half of whom were income eligible, and there were 16 control group subjects, all of whom were income eligible.

Data Collection Strategies

All participants were interviewed and surveyed to determine goals, attitudes, basic values and vocational interests. The survey instrument used was the "Student Career Attitude Survey." This survey instrument represents a portion of a larger battery developed by the San Bernardino County Office of Education to be used in gathering data on work study and work experience education programs. Each participant completed the instrument at the beginning of the project in February and March 1978 and at the close of the program in August and September 1978.

Although there were no significant differences in attitude or motivation resulting from mixing by income, some interesting findings did emerge in this study of the mixed income hypothesis. These findings were:

- Teenagers, regardless of income level, prefer socializing and are not interested in solitary activities
- Teenagers seem to prefer working in a small group to working alone or in a large group
- The nonincome-eligible youth showed, over time, some desire to work alone
- The income-eligible youth showed a preference for working with a variety of materials, compared to the nonincome-eligible youth's preference to work with only one item at a time
- The income-eligible participant in the mixed income group seemed to have less of a realistic appraisal of employer concerns than all other participants
- The income-eligible participants seemed to gain no appreciable benefits from working with the nonincome eligible

Analysis

This was a good test of the mixed income hypothesis. The research requirements were met; measurement techniques were appropriate and adequate. The results do not support the mixed income hypothesis, but they do shed light on other areas of interest.

MARIN COUNTY, CALIFORNIA

Introduction

Mixed income subjects were engaged in a variety of counseling, educational and recreational activities during the test period in addition to a work assignment. Emphasis was placed on internal and external change. This test generated highly usable data, but there was no statistical significance observed.

Test Approach

The Marin County mixed income demonstration program was conducted from June to mid-September 1978 as a special component of the prime sponsor's summer program. Youth participating in the demonstration received similar services to other youth participating in the YETP activities at that time. A primary outcome of the three-and-a-half-month program was work placement. Participants were paired at their job sites, that is, one income-eligible and one nonincome-eligible youth per site. In addition, other services were provided to participants such as counseling, labor market information, educational and vocational seminars, and reimbursement for transportation and child care. Social gatherings and cultural activities were scheduled during this summer program.

Fifty-four slots were provided for the demonstration program. Fourteen income-eligible youth composed the control group, and the experimental group was mixed with 20 income-eligible and 20 nonincome-eligible youth. The income-eligible youth were selected from regular enrollees in the CETA summer program. The nonincome-eligible youth were chosen from referrals by the school district, and youth were sought with demonstrated initiative and academic success. The family income of nonincome-eligible youth varied widely.

Data Collection Strategies

Data were collected from the participants, their employers, participants' co-workers, CETA staff and written documents. Measurement techniques included standardized tests, employer/supervisor and participant co-worker written evaluations, self-rating scales and interviews with participants and employers.

Long-term follow-up research is planned to measure job placement rate, level of employment and degree of effort and success in endeavors to achieve career goals. This research is ongoing.

Data generated by the mixed income test were assessed for all program participants in terms of: (1) pre and post performance and attitudes of the income-eligible participants in the experimental group; and (2) the pre and post performance and attitudes of income-eligible participants in the experimental group versus those in the control group. Unfortunately, this focused analysis and the clear specification of performance and attitude outcomes did not result in statistically significant findings. There are no conclusive results to report.

Analysis

This test of the mixed income hypothesis was well constructed. It is unfortunate that the results were nonsignificant.

The project staff felt that it was important to learn that this type of employment training was of benefit to youth regardless of income. The staff also felt that the mixed income factor had a crucial effect on change in performance or attitude. Perhaps a larger sample size and a longer test would show this effect statistically.

MONTEREY COUNTY, CALIFORNIA

Introduction

This program was geared toward potential school dropouts and paired work experiences with academic instruction. The results were statistically insignificant.

Test Approach

This seven-month program was conducted from March to September 1978 by the Monterey Peninsula School District under subcontract to the Monterey County CETA administration. Career information and experience were provided to 36 youth aged 14 and 15.

The program was called "Executive Internship," and participating youth were placed, for example, in the offices of the mayor and the school principal. In addition to this work site experience, the youth were provided with weekly seminars on career orientation, basic career information, counseling, job seeking techniques and transportation assistance.

Half of the 36 youth formed the control group and half formed the experimental group. The experimental group was equally composed of income-eligible and nonincome-eligible youth. The family income of the nonincome-eligible youth ranged from just above CETA income guidelines to $20,000. Members of the experimental group were paired by income at the work sites. Additional interaction within the experimental group occurred at weekly seminars and group discussions. All students were aware of being participants in a demonstration program and the nature of the research.

Data Collection Strategies

Pre- and post-tests and document review of the youths' performance were the primary measurement techniques. These techniques were: a pre- and post-test of attitudes; a pre- and post-test using the Kuder interest inventory; an analysis of school and job site attendance before and during the demonstration program; and a written job skills assessment instrument. Analysis was then conducted to compare the growth between the youth in the control group with that of the income-eligible youth in the experimental group, and the growth of nonincome-eligible youth was compared to the growth of the income eligible.

Unfortunately, the results of the Monterey County mixed income program were statistically insignificant, and the MBA respondent was unable to point to any useful information gathered from the findings.

Analysis

This test of the mixed income hypothesis was well constructed. Larger numbers may yield significant results if there is a replication. All other research requirements were met.

NEVADA BALANCE OF STATE

Introduction

An alternative vocational education program was the main service provided to mixed income subjects in Carson City. It included counseling and work experience. However, no conclusive results can be presented.

Test Approach

This test of the mixed income hypothesis was subcontracted to the Churchill County School District. The Churchill County School District had been running Project SAVE, an alternative vocational educational program, as well as a summer youth program, and was in a unique position to extend its services to nonincome-eligible youngsters in mixed income groupings.

Participants received vocational guidance, personal counseling, peer counseling, vocational instruction, work experience and classroom training. Subjects were 17 and 18 years old and were identified as being dropout prone. The experimental program started with 23 youth (3 were high school dropouts, and 20 were identified as potential dropouts) and ended with 18 youth who were provided some one-on-one career exploration and personal counseling. The experimental group received allowances plus credits toward graduation for attendance at special vocational education classes. Some of the youth were placed in part-time (after school) employment with public sector agencies. It was unclear whether these were subsidized or unsubsidized. The control group youth were involved in Project SAVE (a certified special education program for the high school grades) and were provided with intensive career exploration, personal counseling, rap groups, training in job interviews, job survival skills, and work site placement in the private sector.

The approach to income mixing is not clear, although it is known that income-eligible and nonincome-eligible subjects participated. Those who were nonincome eligible were only marginally over the CETA income figure.

Data Collection Strategies

Participants were tested by the employment service at the time of their admission to the program. A vocational interest test was administered by staff from the University of Nevada. Both of these were used for assessment purposes rather than being considered part of the experimental design. No post-tests were administered at the completion of the experimental project.

The observations of the counselors concern perceived differences between income-eligible and nonincome-eligible participants. For instance, those who were not income eligible were perceived to have increased self-confidence as a result of the program. Those who were not income eligible seemed to be able to delay gratification better and were more likely to save their earnings to purchase large items than were those who were income eligible.

Analysis

This test was poorly constructed and implemented. There were many contradictions noted by MBA between stated intent and actual outcome. Specific research requirements were not met, and there are no results to report. One of the problems seemed to be in the communication network within the CETA agency. The purpose of the mixed income test was not explained to test administrators; it appeared that the proposal for work might not have been shared with other relevant personnel.

SAN DIEGO, CALIFORNIA

Introduction

This in-school program provided two to three months of work experience for each participant. Pre- and post-tests were used, but interaction between income eligibles and nonincome eligibles was almost absent, making it virtually impossible to test the mixed income hypothesis.

Test Approach

This program used the basic work experience model. The most significant modification of the model was the locally imposed limit on the number of weeks that a participant could spend in a work experience component. According to the contract, 120 youth, ages 16 to 19, were to be enrolled in work experience for a period not to exceed 180 days with an average duration of 70 days. An experimental group of 60 participants was established with 22 income-eligible and 38 nonincome-eligible subjects. Within this group there was a mix of participants in probationary and nonprobationary status, and they were matched by grade, race, age and sex as much as possible. A similar mix was established in a control group of 40 participants, all of whom were income eligible.

Another significant feature of this test of the mixed income hypothesis was the use of subjects on judicial probation. The Department of Probation became the subcontractor on this project in order to secure job placement and training for its clients on probation.

Data Collection Strategies

Upon entry each youth was assessed regarding work-related attitudes, occupational goals and awareness, work history, and achievement in language and math skills. Participants then received a work site assignment based both on the kind of work experience desired by the participant and the availability of that particular kind of work site. The nature of the work sites was such that only one participant could be assigned, thereby decreasing the potential for interaction between those youth who were economically disadvantaged and those who were not. At program termination, subjects were again tested though not as consistently as they had been at entry. In addition to pre- and post-tests, some follow-up of subject status after program participation was attempted.

There were no conclusive findings reported on the mixed income hypothesis. It was found that subjects who were on probation were more likely to look for jobs after the program was over than were those subjects not on probation. In addition, job placement was found to be no more difficult for those on probation than for those not on probation.

Analysis

This was not a test of the mixed income hypothesis. This was a look at mixed grouping, but the two groups were subjects on probation and subjects not on probation. No control group was used, and any conclusions drawn with respect to the mixed income hypothesis are highly speculative.

APPENDIX B

LIST OF RESPONDENTS

PROGRAM DESIGN OPTIONS
FOR SERVING YOUTH OF ALL ECONOMIC BACKGROUNDS
UNDER THE
YOUTH EMPLOYMENT AND TRAINING PROGRAMS

November 1977

U. S. Department of Labor
Employment and Training Administration
Office of Youth Programs
Washington, D. C. 20213

The Issues

The Youth Employment and Demonstration Programs authorized by title II of the Youth Employment and Demonstration Projects Act (YEDPA) seeks "...to establish a variety of employment, training, and demonstration programs to explore methods of dealing with the structural unemployment problems of the Nation's youth. The basic purpose of the demonstration programs shall be to test the relative efficiency of different ways of dealing with these problems in different local contexts...." It was intended that the results would be used as a basis for improving the design of future employment and training programs for youth.

As one approach to such exploration, section 345 (a) (2) of YEDPA authorizes the use of 10 percent of the funds available for Youth Employment and Training Programs (YETP) to include youth from all economic backgrounds in order to test whether or to what extent income eligible youth (those whose family income is no more than 85 percent of the lower living standard income level) would benefit from working with and being trained alongside other (non-income eligible) youth as opposed to receiving the same services in projects where all participants are income eligible. It is the purpose of this paper to present options on how such tests may be carried out and important considerations for test design and implementation.

There are widely varying viewpoints about the wisdom of targeting programs for the most economically disadvantaged. These viewpoints need to be understood in designing any test of income mixing. Arguments against targeting usually begin with the claim of vertical inequities, i.e., that youth above any arbitrary income cutoff may be as much in need as those below. Targeting is justified by the belief that scarce resources should go to those most in need, and that the economically disadvantaged have far more severe problems than the nondisadvantaged. For YETP, Congress has limited the more costly services to the more economically disadvantaged or income eligible (youth from families with income less than 85 percent of the BLS lower living standard). The notion to be tested is whether these income eligible youth would be better served by participating in programs serving youth of all economic backgrounds. There are several arguments as to why this might be expected.

1. How the income eligible might benefit from participating in mixed income programs. Research results have suggested that program effectiveness may be influenced by the availability of positive role models among participants, the atmosphere and approach within the program, and its reputation for success in the community. It is well documented that youth are highly sensitive to peer group pressures. A peer group atmosphere which is indifferent or, in extreme cases, hostile toward work or academic achievement, may make it very difficult to achieve program goals. Positive attitudes toward work and society are, on the average, directly related to family income, and behavioral problems such as juvenile delinquency are inversely related,

(a) The two or more special components and the types of services and activities. The experimental group of income eligible and other participants should be assigned to one or more program services or activities and a comparison group of only income eligible participants assigned to one or more parallel services or activities. The experimental and comparison groups' program services and activities should be similar to make it more likely that any differences between outcomes will be due to the mixing of youth of different incomes rather than other variables. The service mix, costs, duration of services, and delivery agents should be standardized as far as possible.

(b) The services provided in each of the selected components, with any significant differences noted and explained.

(c) A plan for recruiting and assigning participants to the experimental and comparison groups. The folling items should be considered:

- The income eligible youth assigned to the groups should be similar in terms of age, race, sex, education attained and status, court contacts, grade point average, and family income. If it is feasible to do so, random assignments of income eligible participants should be made to the groups. If this is impractical, assignment methods should be used which will keep differences between the income eligible youth in the experimental and comparison groups to a minimum.

- The methods and criteria for recruiting non-income eligible youth for inclusion in the experimental group(s) should be described.

- A determination and explanation should be made of the proportion of the experimental group which will be non-income eligible youth.

- To the extent practical, the experimental and comparison groups should be the same size.

- Every effort should be made to assure that within the experimental group assignments, the mix of participants at various work, training, and service sites reflects the mix in the experimental group as a whole, i.e., insure that the income eligible and other youth are not segregated. For example, if the experimental group is comprised of 40 percent income eligible and 60 percent other, then each work, training, or service site should reflect this same mix as nearly as possible.

(d) A description of staff assigned to the project and program components. To the extent feasible, the staff to serve each group should be the same or similar.

(e) Reporting procedures established to collect reliable information about the types of services provided to members of the experimental and comparison groups. Data collection methods should identify any differences in the services provided to the income eligible and other members of the experimental and comparison groups.

(f) Program outcomes established for the components. Where placement is an appropriate goal, this might be used, or more sophisticated measures such as quality of placements may be used. Other measures may be appropriate, such as tested gains in occupational awareness, changes in attitudes or return to school rates. The program data on participants and costs should be tablulated separately for the experimental and comparison groups.

2. Reporting Requirements. As required in the regulations, a report of the research results will be submitted to the Regional Administrator at the end of the fiscal year as part of the annual review of program operations and a copy sent to the Office of Youth Programs. Regular reporting forms as well as a narrative will be required in this special annual report as outlined below. The end of year report will provide a basic comparison between the program outcomes for income eligible participants in the experimental and comparison groups and between income eligible and higher income participants in the experimental group(s).

(a) Narrative. The narrative section of the report should be prepared covering the points below:

- An update (if necessary) of the research design that was submitted as part of the annual plan;

- A description of any special problems encountered during the data collection process which might have an effect on the interpretation of the results.

- Any information or obeservations on contacts and interactions between the income eligible and other youth in the experimental group;

- The perspectives of participants on their participation in the experimental project. To ascertain the information, participants may be briefly interviewed or tested upon termination; in particular the income eligible should be interviewed or tested to determine whether they perceived any benefits from the mixing of participants;

- The conclusions reached from the analysis of the data including tests of statistical significance and any other interpretation of the data which seems appropriate.

- Any recommendations for program design adjustments, if appropriate.

(b) Forms. In addition to the narrative, other information in the end of year report should be provided through regular YETP reporting forms. The information should be provided separately for (1) income eligible in the experimental group(s); (2) other (non-income eligible) youth in the experimental group(s); (3) income eligible youth in the comparison group.

The following data should be provided:

- What are the characteristics of the participants in the various groups? The Youth Quarterly Summary of Participant Characteristics (YQSPC) form should be used for this part of the report.

- What types of services were provided to the participants in the various groups included in the study? The Youth Program Status Summary (YPSS) form will be used for this part of the report, summarized for the quarters of operation. A narrative explanation should be attached to clarify ambiguous points or to provide additional information.

- What were the outcomes after completing the program? The Youth Program Status Summary (YPSS) will be used for this part of the report. Outcomes related to locally established performance measures should be reported in narrative form.

- What were the costs of the program? The Youth Financial Status Summary (YFSS) will be used to report the financial information.

More Sophisticated Experimental Options

The research design described in the earlier part of this paper is the minimum required for conducting the income mixing experiment program. Since the issue of relationship between income mixing and program outcomes is exceptionally complex, prime sponsors may wish to conduct research which will test additional hypotheses. Some examples are listed below:

- A particular percentage mix of income eligible youth may be significant in terms of program benefits or outcomes. A large proportion of other non-income eligible youth might be required before the impact of the role model can be detected or before acceptance of all participants by employers increases. On the other hand, the income eligible might feel increasingly isolated as their share of participants declines. A study might be designed comparing the results of programs with different proportions of non-income eligible youth.

- It is possible that income eligible or more economically disadvantaged youth may be influenced most by youth whose economic situation is better but not too much better than their own. The income eligible may be able to better identify with youth from families with stable work histories but with modest incomes rather than youth from more affluent families. A study might be designed in which family income criteria is raised sufficiently to qualify only those slightly above the eligible income criteria.

- Prime sponsors may opt to limit the comparison group to a subset i.e., economically disadvantaged or those of other income levels below 85 percent of the lower living standards and structure experimental groups to study the impact of income mixing on this subset.

- An important variable may be the coping skills of the youth rather than the income level. Poorly motivated income eligible youth may be most effectively influenced by working with youth who have developed good attitudes toward work and have done reasonably well in school and previous work employment. In this regard, there are a variety of simple tests which have been developed to assess work attitudes. Counselor interviews might be used to identify more positively oriented youth or success in school might be used as a proxy. A prime sponsor might consciously mix motivated youth with other randomly selected income eligible youth, and compare the results with a project mixing the income eligible and higher income youth.

- A range of measures might be used to assess program effectiveness. Pre- and post-tests of a sample of participants might be used to survey work attitudes, occupational awareness, social values and aspirations. These data might be used to test the relationship between the characteristics of participants on entry, at completion, and on subsequent outcomes. For instance, changes in attitudes and performance ratings during employment and training programs might be compared to unsubsidized placement rates.

The examples cited above are meant to be illustrative rather than exhaustive, and prime sponsors are encouraged to use their ingenuity and experience in developing testable hypotheses. There is no requirement for more than the minimum design and reporting outlined in this paper. However, more ambitious undertakings are welcomed and are likely to attract national attention and contribute to overall national knowledge development efforts as well as local program decisionmaking.

The Office of Youth Programs will coordinate and synthesize the special end of year reports authorized under this paper and will make recommendations on changes in legislation or program guidelines which appear to be indicated on the basis of the research results.

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